



2018 Globalization Report

Who Benefits Most from Globalization?

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Johann Weiß, Dr. Andreas Sachs, Heidrun Weinelt

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Executive summary

Switzerland is the “globalization champion.” No other country achieved higher globalization-based gains in per capita income from 1990 to 2016. That is the main result of the 2018 Globalization Report.

At regular intervals, the report studies the development of the worldwide network on the basis of a comprehensive database and provides a reliable standard for analyzing current questions on globalization. The 2018 Globalization Report consists of two parts. The first part builds on the two previous studies and continues the examination of the extent to which the world’s 42 most important economies have benefited from globalization in the past. The second part of the report contains graphs and tables to show the extent of globalization and its development in all 42 countries studied.

The globalization index, which is closely connected to the established KOF Globalization Index, takes account of the economic, political and social aspects of the worldwide network. The index data can be used as a basis for determining how individual economies’ degree of globalization changed from 1990 to 2016. By using regression analyses, it is possible to quantify the effect that globalization has had on growth in the studied economies. As a result, the country with the highest globalization-based gains in growth per capita – and thus the “globalization champion” – is determined.

The most important results can be summarized as follows:

- The highest absolute gains in per capita gross domestic product (GDP) due to globalization between 1990 and 2016 were achieved by Switzerland, making it the “globalization champion.” Behind it are Japan, Finland, Ireland, Israel and Germany. Lower down in the rankings, solely emerging countries are found. Although these economies often have a strong export industry, they have benefited significantly less from the increase in globalization than other countries when measured in terms of absolute per capita gains in income.
- The emerging countries’ weak position in terms of absolute globalization gains is due to their low economic output in the baseline year, among other reasons. The ranking changes when relative globalization gains are considered: The cumulative globalization-based per capita income gains relative to per capita GDP in 1990 amount to 518% for China. In Germany, they are only 148% and, for the United States, only 39%.

1 Introduction

Who benefits most from globalization? When measured in terms of absolute gains in per capita GDP between 1990 and 2016, Switzerland is the “globalization champion.”

That is the main result of the 2018 Globalization Report, which analyzes globalization’s effect on growth in a total of 42 countries – which collectively account for over 90% of global economic output. The analysis for all highly developed economies and the most important emerging countries determines the extent to which they globalized between 1990 and 2016 and the degree to which they could profit from this. As a result, the “globalization champion” and the big and small winners of globalization are determined.

Furthermore, the globalization report uses clear factsheets to analyze the extent of globalization and its development separately in the 42 economies studied. This makes it clear how the individual subcategories of globalization – economic, political and social – have developed and what the consequences were for growth and per capita income.

2 Who benefits most from globalization?

In order to quantify the growth effects of globalization, it is necessary to start by producing a globalization index. This index is closely connected to the established KOF Globalization Index provided by the ETH Zurich¹ and measures the development of globalization in the countries studied.² An econometric study then identifies the correlations between globalization and economic development in these countries. This serves as the basis for quantifying the growth effect of globalization, ranking the globalization-related, country-specific changes in economic output and determining the “globalization champion” – the country that has achieved the highest absolute gains in per capita income (a brief description of the methodology can be found in Box 1).

2.1 Globalization index results

The top spots in the globalization index are occupied by Ireland, the Netherlands and Belgium, highly developed, well-connected and relatively small EU countries (Table 1). The other top ten positions are held solely by Member States of the European Union and Switzerland, which is also tightly integrated into the structures of the European Single Market through numerous bilateral agreements. The most globalized non-European countries are in 11th place (Canada) and 21st place (Australia).

The larger European countries such as the United Kingdom, France, Germany and Spain follow at the top of the middle, while Italy occupies 23rd place. The two largest highly developed economies, the United States and Japan, are in 28th and 33rd place. Bringing up the rear are countries like Mexico, China, Brazil, Argentina and India – the major emerging countries.³

A country’s ranking in the overall globalization index is determined by each country’s respective position in the three sub-indices: the economy (weighting: 60 percent), social dimensions and politics (weighting: 20 percent each). The Economy sub-index provides indicators for cross-border ties in the areas of trade in goods and services as well as wages and capital flows. The transaction metrics also include transaction restrictions and capital controls. The social dimension includes indicators for cultural proximity and personal contacts, among others. Political globalization is also reflected in a third sub-index. This dimension takes account of aspects such as the number of international treaties or membership in international organizations. It is possible to find a detailed methodological description of the globalization index in chapter 4.1.1.

The respective position in the sub-indices shows the categories in which the countries have particularly high or low globalization scores (Table 2). The top three countries, Ireland, Netherlands and Belgium, have very high scores, especially in the economic and social categories, and the Netherlands and Belgium also have such scores in the Political sub-index.

1 See Dreher (2006).

2 The economies studied are the 42 countries in Prognos’ macroeconomic multi-country model, VIEW. This list of countries includes all the highly developed economies as well as all large emerging countries, which together make up over 90% of global economic output.

3 These results are broadly consistent with the findings of other globalization indices. In the first version of the study, the “2014 Globalization Report,” there is a detailed comparison of the globalization index with the New Globalization Index, the globalization index produced by Ernst & Young, the Economic Intelligence Unit (EIU) and the KOF Globalization Index. The KOF Globalization Index provided by the ETH Zurich is intended as a methodological model for the index used here.

TABLE 1 Globalization Index for 2016

| Ranking | Country | Globalization index | Ranking | Country | Globalization index |
|---------|----------------|---------------------|---------|---------------|---------------------|
| 1 | Ireland | 91.32 | 22 | Bulgaria | 63.70 |
| 2 | Netherlands | 91.06 | 23 | Italy | 63.23 |
| 3 | Belgium | 85.62 | 24 | Poland | 62.57 |
| 4 | Switzerland | 83.11 | 25 | Slovenia | 62.50 |
| 5 | Denmark | 77.26 | 26 | New Zealand | 62.43 |
| 6 | Sweden | 76.53 | 27 | Romania | 61.61 |
| 7 | Austria | 75.50 | 28 | United States | 60.73 |
| 8 | United Kingdom | 74.87 | 29 | Latvia | 59.99 |
| 9 | Finland | 72.72 | 30 | Greece | 59.73 |
| 10 | Hungary | 72.40 | 31 | Chile | 58.89 |
| 11 | Canada | 71.69 | 32 | Israel | 57.55 |
| 12 | Norway | 70.92 | 33 | Japan | 51.83 |
| 13 | Portugal | 70.81 | 34 | South Africa | 50.72 |
| 14 | Estonia | 70.72 | 35 | Turkey | 48.37 |
| 15 | Czech Republic | 70.20 | 36 | Russia | 46.53 |
| 16 | France | 70.18 | 37 | South Korea | 46.34 |
| 17 | Slovakia | 66.46 | 38 | Mexico | 44.05 |
| 18 | Germany | 66.29 | 39 | China | 40.92 |
| 19 | Spain | 65.98 | 40 | Brazil | 38.73 |
| 20 | Lithuania | 64.96 | 41 | Argentina | 34.67 |
| 21 | Australia | 64.82 | 42 | India | 30.93 |

Source: Prognos 2018

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The large emerging countries mostly occupy positions toward the bottom in the Economy and Social sub-indices as well as in the overall index. At first glance, this may come as a surprise, especially since China is often considered to be a “pacemaker” of globalization.⁴ In many emerging countries, however, the capital and financial markets are much less interwoven internationally than in most industrialized countries. Empirical studies show that the integration of emerging countries into global financial markets has been slower than in foreign trade.⁵ Furthermore, it is necessary to consider that the standardization of all transaction metrics in the Economy sub-index by adjusting for the size of the respective economy tends to lead to a worse positioning of the larger countries.⁶ Measured in absolute terms, for example, China is the “export champion.” Measured relative to its economic output, however, the country is ranked in one of the last positions relative to other countries with regard to the trade indicator (Box 2).

⁴ See, for example, McKinsey Global Institute (2017) in this regard.

⁵ See, for example, IMF (2016) in this regard.

⁶ Results from empirical research show that even methodical approaches which “handicap” large economies less give similar results (see e.g. Vujakovic 2010).

TABLE 2 Sub-indices of the globalization index for 2016

| Ranking | Country | Economy | Ranking | Country | Social | Ranking | Country | Politics |
|---------|----------------|---------|---------|----------------|--------|---------|----------------|----------|
| 1 | Ireland | 89.6 | 1 | Switzerland | 97.2 | 1 | France | 98.7 |
| 2 | Netherlands | 87.3 | 2 | Ireland | 97.1 | 2 | Italy | 98.7 |
| 3 | Belgium | 78.3 | 3 | Netherlands | 96.7 | 3 | Belgium | 97.0 |
| 4 | Switzerland | 74.7 | 4 | Austria | 96.6 | 4 | Sweden | 96.7 |
| 5 | Estonia | 67.5 | 5 | Belgium | 96.3 | 5 | Netherlands | 96.5 |
| 6 | Denmark | 66.6 | 6 | Canada | 95.0 | 6 | Spain | 96.3 |
| 7 | Sweden | 65.4 | 7 | Denmark | 93.0 | 7 | Austria | 96.3 |
| 8 | United Kingdom | 62.6 | 8 | France | 92.5 | 8 | United Kingdom | 95.7 |
| 9 | Hungary | 61.7 | 9 | Norway | 91.6 | 9 | Brazil | 95.3 |
| 10 | Austria | 61.5 | 10 | United Kingdom | 91.0 | 10 | Switzerland | 94.2 |
| 11 | Finland | 60.7 | 11 | Germany | 90.6 | 11 | Denmark | 93.6 |
| 12 | Czech Republic | 59.6 | 12 | Sweden | 89.6 | 12 | Norway | 93.5 |
| 13 | Portugal | 58.4 | 13 | Australia | 89.0 | 13 | Argentina | 93.3 |
| 14 | Latvia | 57.8 | 14 | Finland | 88.6 | 14 | Canada | 93.1 |
| 15 | Canada | 56.8 | 15 | Portugal | 88.1 | 15 | Finland | 93.0 |
| 16 | Norway | 56.5 | 16 | Spain | 88.1 | 16 | Turkey | 92.5 |
| 17 | Lithuania | 55.3 | 17 | Slovakia | 87.4 | 17 | Germany | 92.3 |
| 18 | Slovakia | 54.2 | 18 | Czech Republic | 86.7 | 18 | United States | 92.0 |
| 19 | Bulgaria | 53.7 | 19 | Hungary | 85.5 | 19 | Russia | 91.9 |
| 20 | France | 53.2 | 20 | Greece | 85.0 | 20 | Greece | 91.9 |
| 21 | Slovenia | 52.1 | 21 | Lithuania | 85.0 | 21 | India | 91.7 |
| 22 | New Zealand | 51.9 | 22 | Poland | 83.9 | 22 | Hungary | 91.4 |
| 23 | Chile | 51.3 | 23 | Italy | 83.4 | 23 | Ireland | 90.9 |
| 24 | Germany | 49.5 | 24 | United States | 82.7 | 24 | Portugal | 90.6 |
| 25 | Israel | 49.4 | 25 | Israel | 80.7 | 25 | Australia | 90.5 |
| 26 | Romania | 49.2 | 26 | New Zealand | 77.0 | 26 | Romania | 90.4 |
| 27 | Spain | 48.5 | 27 | Estonia | 76.8 | 27 | South Korea | 89.9 |
| 28 | Australia | 48.2 | 28 | Slovenia | 74.6 | 28 | Chile | 89.2 |
| 29 | Poland | 46.7 | 29 | Bulgaria | 73.9 | 29 | Poland | 89.0 |
| 30 | Italy | 44.7 | 30 | Latvia | 72.9 | 30 | Japan | 88.1 |
| 31 | United States | 43.0 | 31 | Japan | 71.0 | 31 | South Africa | 88.1 |
| 32 | Greece | 40.6 | 32 | Turkey | 70.2 | 32 | Czech Republic | 85.6 |
| 33 | South Africa | 39.4 | 33 | Romania | 70.1 | 33 | China | 83.7 |
| 34 | Mexico | 33.4 | 34 | Russia | 68.3 | 34 | Bulgaria | 83.4 |
| 35 | Japan | 33.3 | 35 | China | 53.8 | 35 | Slovakia | 82.4 |
| 36 | South Korea | 29.5 | 36 | South Korea | 53.4 | 36 | Slovenia | 81.5 |
| 37 | Turkey | 26.4 | 37 | Argentina | 51.8 | 37 | New Zealand | 79.5 |
| 38 | Russia | 24.2 | 38 | Chile | 51.2 | 38 | Estonia | 74.1 |
| 39 | China | 22.4 | 39 | Mexico | 50.8 | 39 | Lithuania | 73.8 |
| 40 | Brazil | 18.3 | 40 | South Africa | 47.3 | 40 | Mexico | 69.3 |
| 41 | India | 12.1 | 41 | Brazil | 43.6 | 41 | Israel | 58.8 |
| 42 | Argentina | 9.4 | 42 | India | 26.5 | 42 | Latvia | 53.8 |

Source: Prognos 2018

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BOX 1 Summary of the methodology

A detailed analysis of the correlations between globalization and the dynamism of economic growth is the core of the study. This serves as the basis for quantifying the economic changes due to globalization since 1990. The following section provides an overview of the method. The appendix to the study contains a detailed description of the methodology.

The “globalization champion” is determined in three steps:

1. Production of the globalization index
2. Studying the correlations between globalization and economic development
3. Determining the “globalization champion”

In order to be able to quantify the economic influence of globalization, this multi-layered process needs to be made measurable. The first step is taken on the basis of a comprehensive globalization index. This index is made up of sophisticated indicators illustrating the economic, social and political aspects of globalization. The selection of the indicator is based on the KOF Globalization Index provided by the ETH Zurich.⁷

The correlations between globalization and economic development are studied in the second step. The growth effect of globalization is quantified using regression analyses. In the regressions, economic development represents a dependent variable and is interpreted through the percentage rise in per capita gross domestic product.

The dependent variable is the produced globalization index. The regression results show whether there is a statistically significant correlation with economic development and how pronounced this is. The elasticity of per capita economic growth with regard to globalization is then used in order to quantify individual countries’ gains in growth due to globalization and to determine the “globalization champion”.

The gains in growth due to globalization are quantified in two steps. Initially, a mathematical calculation is made for each country to determine the growth rates that it would have had in the event of a period of stagnation in globalization. Next, the annual changes in the globalization index are multiplied by the estimated globalization effect on gross domestic product and subtracted from the historical growth rate values.

Finally, based on GDP at the start of the period in question and applying the recently calculated growth rates, a counterfactual growth trajectory is created for each country to illustrate its economic development if globalization had stagnated, without including other reciprocal effects.

The comparison of the historical development of gross domestic product with the counter-factual trajectory shows individual countries’ gains in and losses of growth due to globalization. Finally, the “globalization champion” is crowned, the winner being the country that was able to cumulatively achieve the largest gains in per capita gross domestic product over the whole period between 1990 and 2016 as a result of globalization.

⁷ See Dreher (2006).

In addition to the more technical aspect of standardizing all transaction metrics for the respective economic output, there are also substantive reasons why larger countries are less interconnected internationally on average. For example, the relatively low score that Germany achieves on the globalization index can be explained in part by size effects. Domestic markets usually play a more important role for larger economies than for smaller ones. Thus, the added value chains of companies from smaller countries rely to a much greater extent on international suppliers. In Germany, the total value of exports and imports in 2016 was around €2.3 trillion – nine times as high as in the Czech Republic. In terms of gross domestic product, the order is

reversed: the Czech Republic exported and imported goods amounting to 131% of its economic output. This “openness” for Germany only amounts to 68%. There is a comparable difference between absolute and relative values for other indicators as well.

BOX 2 Why does China occupy one of the lowest places in the globalization index?

China is ranked in 39th place, one of the lowest places, in the overall globalization index. This result may surprise readers initially since the country has been regarded for years as an important engine of the global economy with one of the highest export volumes. China's comparatively low level of global networking results from the comprehensive set of indicators underlying the calculation and going beyond individual aspects discussed in public. China was ranked 39th in the Economy sub-index, 35th in the Social sub-index and 33rd in the Political sub-index (Table 2).

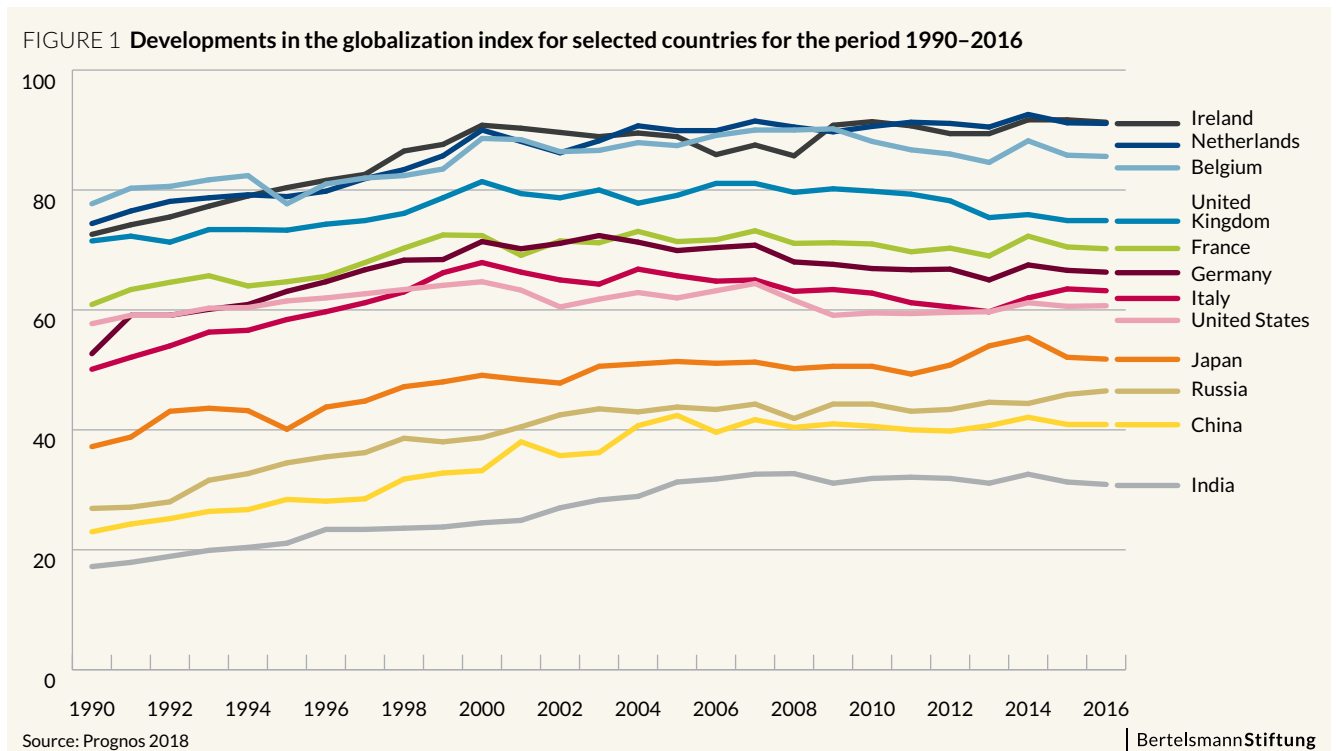
The calculation of the index value for the economic dimension also includes transaction metrics and transaction restrictions. These restrictions hurt China's index value: This is because China has stricter capital market restrictions and high import tariffs relative to other countries and also other emerging countries. Initially, it is necessary to remember that transaction metrics are not absolute values, but rather stand in relation to economic output. This calculation is necessary for producing the index so that different sized economies can be compared. For the second-largest economy in the world, this relative method tends to lead to lower scores, among others for portfolio investments (7% of GDP – 42nd place), for foreign direct investments (23% of GDP – 41st place) and for trade in services (6% of GDP – 40th place). Even in trade, the export nation of China occupies only 38th place with an export volume of 31% relative to gross domestic product. In absolute terms, the country accounts for a nominal amount of just under €3.5 trillion, ranked 2nd behind the United States.

The Political sub-index includes two large, highly developed economies from Europe at the top – France and Italy. The following places in the ranking are also occupied by European countries that are already highly politically networked on account of their membership in the European Union. Brazil is also an emerging country in the top ten.

Country-specific differences are also responsible for the place of a country in the globalization index or in the individual sub-indices for some indicators such as geographical particularities or the country-specific significance of individual sectors such as the financial sector. In particular, the Netherlands and Belgium have a very high degree of openness due to the interregional significance of the ports in Rotterdam and Antwerp. Ireland occupies a leading position in international capital movements due to the importance of the capital, Dublin, as a financial center.

Overall, global networking has increased significantly over the past two-and-a-half decades. As a result, the median of the globalization index for all 42 analyzed countries has risen from 44 points in 1990 to 64 points in 2016. The momentum in globalization was especially high in the 1990s and reached its peak at the beginning of the 2000s. The ranking of the countries in the index has hardly changed over time (Figure 1).

This analysis also shows that it is above all the smaller, highly developed economies in Europe that make up the leading group of the most globally networked countries. Accordingly, the leading group has consisted of three countries, Ireland, the Netherlands and Belgium, since 1990. Behind them, at the top of the group in the middle, come the larger European countries. The space between the countries in this group has decreased in recent years. For example, there were still 21 index points between the United Kingdom and Italy at the beginning of the decade, but there are still only 12 index points between them in the current index. Japan, unlike almost all other highly developed economies, has continuously improved its score, even at the end of the period analyzed. At the same time, the very low baseline level relative to economically similar countries should be taken into account here. The most dynamic gains in the globalization index were seen in emerging countries such as China, India and Russia. The degree to which these countries were inter-connected was still very low at the beginning of the analyzed period, meaning that they had a great deal of potential to catch up.



2.2 Correlation between globalization and economic growth

The correlations between globalization and the economic development in the analyzed countries are determined by an econometric study. The regression analysis shows a stable and significantly positive correlation between a rising degree of globalization and the per capita growth of economies: The growth rate of per capita gross domestic product increases by 0.33 percentage points when the globalization index increases by one point (Box 3).

BOX 3 Results of regression analyses on the correlation between globalization and economic development

The correlation between globalization and economic development is quantified by using regression analyses that isolate the effects of individual metrics on economic development in the economies analyzed. The economic development is interpreted as a dependent variable in terms of the percentage growth of per capita economic output.

The globalization index acts as the main dependent metric. Ultimately, the regression results for this variable show how much growth is affected by globalization. The calculations are based on the results in column 2 of Table 3. Alongside the globalization index (as the main dependent variable), the baseline specification includes per capita GDP, the birth rate, investments and a crisis indicator for the massive recession in 2008 and 2009 (as control variables).⁸ Changes in these variables are connected with a change in economic growth.

Overall, the regression analysis demonstrates that globalization has a significant positive impact on the growth of per capita GDP. The estimated coefficient of 0.33 says that an average increase of one point in the globalization index leads to an increase of 0.33 percentage points in the growth of per capita GDP. A specific example: The globalization index for Germany increased by an average of 0.52 points p.a. between 1990 and 2016. Accordingly, an annual average of 0.17 percentage points of the per capita growth in Germany can be traced back to the increase in networking with the rest of the world. As a whole, the average growth in per capita GDP over that period was 1.33%. Thus, globalization plays an important role in this growth.

The other estimated results of the baseline specification also show the expected signs. Per capita GDP, the birth rate and the indicator for the global recession in 2008/2009 negatively influenced the estimate, and all these results are statistically significant. The coefficient of -8.86 for the influence of economic output means that an increase of 1% in per capita GDP leads to a decrease of 0.0886

percentage points in per capita growth two years later. From a convergence point of view, this negative correlation is due to the long-term harmonization of living conditions in the various economies. The theory is that growth rates will fall as economic output increases. For fertility, an increase of 1% corresponds to a slowdown of 0.081 percentage points in per capita growth. The estimated coefficient of -3.81 for the global recession in 2008/2009 means that per capita economic growth in this period was about 3.81 percentage points lower than in the rest of the period analyzed. The estimated value of investments as a percentage of GDP (0.15) also falls into line with expectations.

The impact of increasing globalization on per capita growth can be determined separately for all three components in the globalization index – the economic, social and political. Each of the three components contributes about one third to the positive overall effect.⁹ All three estimated coefficients are also significant: An increase of 1 index point in the sub-index on economic globalization leads to an increase of 0.09 percentage points in the growth rate of per capita GDP. An increase of 1 index point in the sub-indices on social or political globalization leads to an increase of 0.15 percentage points (Table 3, column 3). This result illustrates: Not only an increase in economic interdependence has a significantly positive impact on economic growth. An increasing degree of global networking in the areas of society and politics also leads to higher per capita growth. For example, an increase in social globalization through an increase in personal contacts can also improve the global flow of information. The transfer of knowledge and the exchange of know-how promote productivity and thus also economic growth. In addition, the robustness of the estimate is verified by comparing the baseline specification with the results of alternative specifications. The alternatives are examined with different combinations of dependent variables on the basis of the baseline specification. The results of these regressions reinforce the finding that the estimated influence that globalization and the other dependent variables have on growth can be regarded as robust and thus reliable (Table 15 and Table 16 in the Appendix).

⁸ The selection of the variables for this baseline specification is largely based on the significance of the growth effects of these determinants as demonstrated in the results.

⁹ The coefficients of the three components of economic, social and political globalization do not add up exactly, but just approximately to the coefficient of the globalization index overall. This is because regression analysis is subject to estimate uncertainties.

TABLE 3 Regression results on the impact of globalization on per capita economic growth

| Dependent variable: growth of per capita GDP in percent | IV method with FE | IV method with FE and sub-indices |
|---|--------------------|-----------------------------------|
| Globalization index | 0.33*** (0.07) | |
| Economic globalization | | 0.09*** (0.03) |
| Social globalization | | 0.15*** (0.04) |
| Political globalization | | 0.15** (0.07) |
| GDP per capita in period before last (logarithmized) | -8.86*** (1.57) | -11.42*** (1.5) |
| Birth rate (logarithmized) | -8.07*** (1.98) | -4.61*** (1.68) |
| Investments (as % of GDP) | 0.15** (0.07) | 0.49*** (0.06) |
| Crisis indicator 2008–2009 | -3.81*** (0.41) | -4.42*** (0.44) |
| Number of observations | 1,050 | 1,050 |
| R ² (centered) | 0.439 | 0.497 |

Notes: The symbols *, ** and *** show the significance of the estimates for the 10%, 5% and 1% levels. The figures in brackets are the standard errors by country clusters. All regressions contain a constant. FE = country-specific fixed effects

Source: Prognos 2018

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2.3 Effects of globalization on growth

The degree to which the increase in globalization between 1990 and 2016 was connected with additional income gains in the 42 studied economies is analyzed on this basis.

For this, the actual historical development of per capita gross domestic product is compared with a counterfactual scenario “without an increase in globalization.” This counterfactual scenario is based on the assumption that the degree of globalization and thus the index of globalization in each country corresponds to the respective baseline level in 1990.¹⁰

¹⁰ For the counterfactual scenario, the development of per capita GDP is calculated using the following formula:

$$\frac{BIP_t}{POP_t} = \frac{BIP_{1990}}{POP_{1990}} * \prod_{k=1991}^t \left(1 + \frac{g_k - 0,31 * (GI_k - GI_{k-1})}{100} \right)$$

Where g_t stands for the historical growth rate of GDP in percent, POP_t for the population in year t and GI_t for the globalization index value in year t . Next, the GDP itself is determined through the multiplication of per capita GDP with the historical population figures.

BOX 4 The importance of data revisions for the globalization effect by using the example of economic development in Eastern European countries between 1990 and 1995

Values for per capita gross domestic product as of 1990 are used for each of the 42 analyzed countries to quantify the globalization effect – i.e., technically speaking, to estimate the coefficient of the influence that globalization has had on the growth of per capita gross domestic product in the regression. The data comes from the World Bank's World Development Indicators (WDI) database. Data revisions by the World Bank lead to slightly different per capita GDP developments in a few countries as compared to the 2016 Globalization Report and the 2014 Globalization Report. However, these revisions marginally change the results of the estimate and thus the quantification of the globalization effect.

By contrast, data on the development of per capita GDP in Estonia, Latvia, Lithuania, Slovenia and Slovakia between 1990 and 1995 have a slightly greater influence. The WDI database (as well as databases from Eurostat, the IMF or OECD) does not currently publish data on the development of per capita GDP in the Baltic States and Slovenia for this period. The World Bank data for Slovakia is only available as of 1992. At the time the first 2014 Globalization Report was published, annual growth rates for gross domestic product between 1990 and 1995 were reported in the WDI database for most of these countries (exception: Estonia). In order to be able to take account of this period in the current version of the globalization report, the old status of the data was incorporated. The missing data for Estonia was estimated under the assumption that its economic development between 1990 and 1995 was analogous to the development in Lithuania, which has a very similar economic structure. If the period from 1990 to 1995 were not taken into account for these countries, it would have a significant impact on the regression calculation. As a result, there would be a (significant) coefficient of 0.20 (instead of 0.33; see Table 3, column 2).

The historical development of per capita gross domestic product and the correlation between globalization and economic growth as calculated in the regression are taken into account; and then it is calculated per year and country how high the per capita economic output would have been without the change in global networking. The differences in the development of per capita gross domestic product between the historical and counterfactual trajectory are summed up over the entire period from 1990 to 2016. This metric, the cumulative income gains due to globalization, serves as a central value for measuring the globalization effects of individual countries. In interpreting the results, it is necessary to differentiate these metrics from general economic growth (Box 5). The “globalization champion” is the economy where inhabitants have experienced the highest gains in income as a result of globalization.

Additional rankings take into account, on the one hand, the different economic situation of each of the various countries (section 2.4.1) and, on the other, the different baseline levels and size relationships (section 2.4.2).

2.3.1 “Globalization champion” determined using per capita income gains

Table 4 shows the main results from the determination of the “globalization champion.” The comparison of the per capita gains in income due to globalization in the 42 analyzed economies ends with Switzerland in first place.¹¹ Switzerland is the “globalization champion” in this analysis of absolute gains. Behind it by quite a bit are Japan, Finland, Ireland, Israel and Germany. The rest of the countries in the top 10 are – apart from South Korea – all small European economies: Denmark, the Netherlands and Slovenia. In Slovenia, a Central Eastern European country also landed in a top spot.

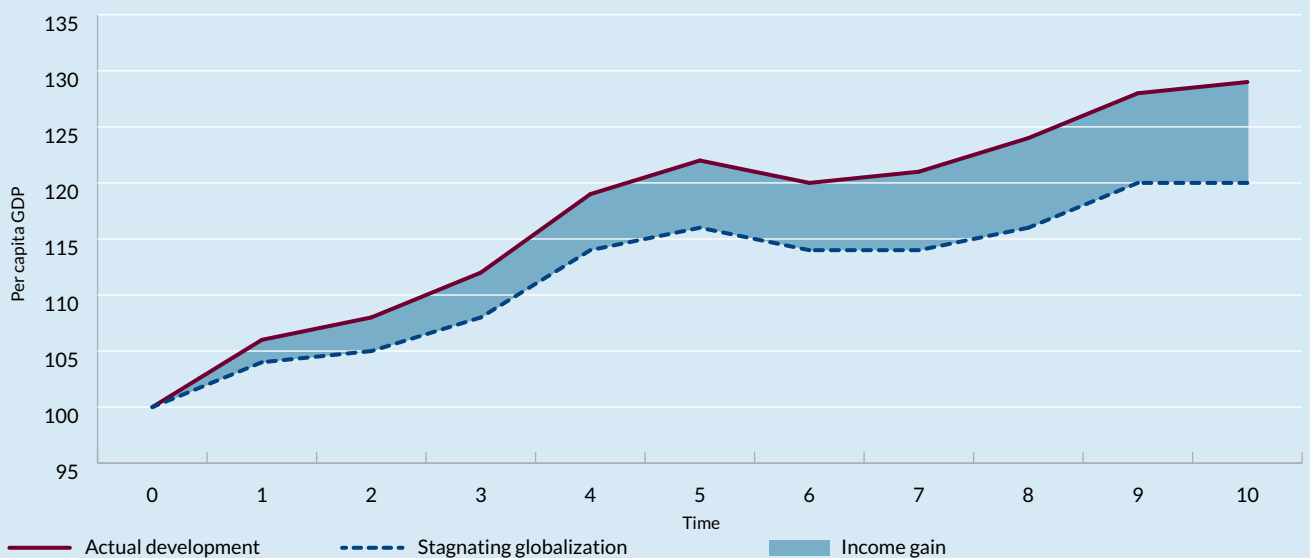
¹¹ In classifying the results properly, it is important to remember that this analysis allows for no statement on income distribution within a country. The reported gains in income due to increasing globalization refer exclusively to the population as a whole.

BOX 5 Interpretation of globalization-induced income gains as a key indicator in determining the “globalization champion”

The stagnation of globalization assumed for the counterfactual scenario implies lower economic growth and, therefore, a flatter growth trajectory. The year-on-year difference between per capita gross domestic product according to this alternative trajectory and the actual development shows the absolute economic gains due to globalization (Figure 2).

In order to measure the cumulative effects of globalization, these gains for each of the 42 studied countries are added together for the entire period from 1990 to 2016. The metric calculated in this way is also described as the “cumulative gain in income due to increasing globalization.” The gain in income must be differentiated from the metrics used for the national accounts such as disposable income, for example.

FIGURE 2 Schematic representation of the change in gross domestic product and globalization-induced income gains



Source: Prognos 2018

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Industrialized countries from North America to Central Europe and Oceania are found in 10th to 23rd place. However, not all major established economies have benefited equally from increasing international networking. For example, gains in per capita income due to globalization were three times higher in Japan than in the United States. In some cases, countries far less developed economically in 1990 such as Slovenia or South Korea have achieved higher gains in income than large industrialized nations.

The Central Eastern European economies are remarkably close together. This group of countries is mainly in 24th to 31st place.

Solely emerging countries are found lower down in the rankings. The major emerging markets of China and India are the laggards with annual average gains in income due to globalization totaling €79 or €22 per capita over the period from 1990 to 2016. Although these countries often have a strong export industry, they have benefited significantly less from the increase in globalization than other countries when measured in terms of absolute per capita gains in income. One important reason for this, in addition to these countries' relatively low degree of globalization, is their very low baseline level for gross domestic product per capita in 1990.

TABLE 4 Absolute per capita income gains due to increasing globalization 1990–2016

| Ranking | Country | Average annual per capita income gain from 1990 onwards In €s* | Cumulative per capita income gain from 1990 onwards In €s* |
|---------|----------------|--|--|
| 1 | Switzerland | 1,913 | 49,730 |
| 2 | Japan | 1,502 | 39,046 |
| 3 | Finland | 1,410 | 36,664 |
| 4 | Ireland | 1,261 | 32,794 |
| 5 | Israel | 1,157 | 30,080 |
| 6 | Germany | 1,151 | 29,922 |
| 7 | Denmark | 1,150 | 29,904 |
| 8 | Netherlands | 1,080 | 28,072 |
| 9 | Slovenia | 953 | 24,768 |
| 10 | South Korea | 908 | 23,598 |
| 11 | Austria | 904 | 23,491 |
| 12 | Greece | 894 | 23,254 |
| 13 | Portugal | 819 | 21,297 |
| 14 | Sweden | 793 | 20,608 |
| 15 | Italy | 778 | 20,219 |
| 16 | Australia | 768 | 19,962 |
| 17 | Canada | 752 | 19,560 |
| 18 | France | 659 | 17,122 |
| 19 | Belgium | 624 | 16,225 |
| 20 | United Kingdom | 548 | 14,250 |
| 21 | New Zealand | 543 | 14,110 |
| 22 | Hungary | 534 | 13,884 |
| 23 | Spain | 530 | 13,770 |
| 24 | Estonia | 471 | 12,238 |
| 25 | United States | 445 | 11,575 |
| 26 | Chile | 403 | 10,467 |
| 27 | Slovakia | 387 | 10,065 |
| 28 | Poland | 350 | 9,093 |
| 29 | Latvia | 320 | 8,324 |
| 30 | Lithuania | 318 | 8,280 |
| 31 | Czech Republic | 289 | 7,507 |
| 32 | Turkey | 257 | 6,692 |
| 33 | Norway | 254 | 6,610 |
| 34 | Romania | 188 | 4,880 |
| 35 | South Africa | 186 | 4,826 |
| 36 | Bulgaria | 166 | 4,313 |
| 37 | Brazil | 124 | 3,218 |
| 38 | Mexico | 122 | 3,175 |
| 39 | Russia | 116 | 3,004 |
| 40 | Argentina | 110 | 2,862 |
| 41 | China | 79 | 2,049 |
| 42 | India | 22 | 567 |

* Actual prices in 2000; rounded values

Source: Prognos 2018

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BOX 6 Comparison of current results with the results in the 2014 and 2016 Globalization Report

The research design used here to calculate the globalization index and the definition of the “globalization champion” was used for the first time in 2014. In 2016 an update was carried out with an extended analysis period. The present study is the second update with a further extension of the analysis period until 2016. The additional years in the analysis period mean that the cumulative income gains due to globalization for most countries are higher than in the previous reports. In addition, the estimated regression coefficient used to quantify the effect of globalization on per capita gross domestic product has increased slightly compared to the previous version. It now stands at 0.33 (2016 Globalization Report: 0.31; 2014 Globalization Report: 0.35). Both aspects tend to result in higher cumulative income gains for all countries.

All three reports produce a similar picture in regard to the ranking of absolute per capita income gains due to globalization (Table 4). Switzerland, Japan and Finland occupy the top positions, but in a different order. Such moderate shifts result from the extended analysis period and isolated data revisions. While Japan was still the “globalization champion” in the 2016 Globalization Report, followed by Switzerland, the two countries have switched places in the current calculation. Switzerland is now ahead of Japan and Finland, which was crowned the “globalization champion” in 2014. There were also minimal shifts in the ranking of Germany: it was in 4th place in 2014, and in 6th place in 2016 and in this version in 2018.

Major changes by more than four places can be observed in Slovenia, New Zealand, Norway and the Netherlands. These shifts are mainly driven by above- and below-average dynamics in the globalization index and economic growth from 2014 to 2016, which was not reflected in the 2016 report. In the case of New Zealand, revised data from the World Bank for the early 2000s is also included.

The underlying globalization index also changed in some cases. These alterations are often due to data revisions and great recent changes. Germany’s globalization index rose slightly relative to the previous report – in part due to lower trade barriers in recent years – and thus its place in the globalization index also rose (Table 1). Major shifts in the globalization index are seen in New Zealand, Lithuania and Greece. For example, Greece’s globalization index fell

noticeably since 2015 as a result of its weak performance in foreign trade. By contrast, Lithuania's globalization index is now significantly higher than in the last study because a substantial increase in cross-border capital flows has driven the index upward now.

As already seen in the preceding report, a high globalization index in 2016 does not necessarily entail high-income gains due to globalization. The countries with the highest globalization index – Ireland, the Netherlands, Belgium (Table 1) – usually do not occupy top places for per capital gains in income due to globalization (Table 4). The diverging places in both rankings can be attributed to the different, country specific dynamics in global networking. It is not a consistently high degree of globalization, but rather a growing degree of globalization over time that gives rise to income gains due to globalization – Ireland, the Netherlands and Belgium had probably already achieved significant gains in income through international networking before the beginning of the analysis period.

The country factsheets (chapter 3) graphically illustrate how the gains in income over time are to be evaluated. Countries such as the “globalization champion” Switzerland or Germany had already networked increasingly globally in the 1990s and grew strongly during these years. The cumulative gains in income due to globalization are relatively high over the analysis period. However, countries such as Belgium or Sweden have low gains in income. The globalization index of these highly globalized nations only increased at the turn of the millennium and only to a small extent. The examples show how important the developments in the early years of the analysis period are for the methods selected in this study (Box 4).

Absolute gains in income alone do not provide any information about the additional consumption opportunities that arise for the population from higher income. In order to take account of the country-specific price level in the analysis, Table 5 shows the per capita gains in income due to globalization weighted by purchasing power. Switzerland also tops the rankings according to this alternative criterion. Countries with a lower price level such as Slovenia, Greece or Hungary move up in this regard. Emerging countries are also at the bottom of the list from this perspective.

BOX 7 Choice of analyzed period

The analyzed period (1990–2016) is limited firstly by the fall of the “Iron Curtain” and the breakdown of the planned economies in the former Eastern Bloc. In the 1990s, the integration of the former Eastern Bloc countries into the (free market-based) global economy began. China also accelerated the opening of its markets to foreign trade. This led to a noticeable surge in internationalization. The end of the analyzed period is dictated by the limits of the available data.

It should be noted that the choice of the analyzed period has noticeable effects on the globalization gains calculated: The earlier a country (e.g. Switzerland) has been able to benefit from globalization, the longer the period over which per capita income gains are able to be accumulated. In contrast, countries like Chile and Slovakia, which have only seen a clear increase in their globalization index during the latter period, are disadvantaged by the choice of the analyzed period. On the other hand, a later start to the analyzed period disadvantages those countries which opened their economies up to the world relatively early and then remained constantly at a high level.

TABLE 5 Purchasing power adjusted per capita income gains due to increasing globalization from 1990 to 2016

| Ranking | Country | Average annual per capita income gain In €, adjusted* | Cumulative per capita income gain In €, adjusted* |
|---------|----------------|---|---|
| 1 | Switzerland | 1,805 | 46,918 |
| 2 | Slovenia | 1,680 | 43,678 |
| 3 | Finland | 1,554 | 40,412 |
| 4 | Ireland | 1,449 | 37,685 |
| 5 | Greece | 1,448 | 37,660 |
| 6 | South Korea | 1,374 | 35,716 |
| 7 | Israel | 1,371 | 35,638 |
| 8 | Hungary | 1,368 | 35,567 |
| 9 | Portugal | 1,344 | 34,943 |
| 10 | Germany | 1,324 | 34,411 |
| 11 | Netherlands | 1,315 | 34,193 |
| 12 | Estonia | 1,089 | 28,307 |
| 13 | Austria | 1,080 | 28,075 |
| 14 | Denmark | 1,071 | 27,858 |
| 15 | Italy | 1,047 | 27,232 |
| 16 | Japan | 1,044 | 27,153 |
| 17 | Australia | 935 | 24,302 |
| 18 | Canada | 910 | 23,663 |
| 19 | New Zealand | 856 | 22,250 |
| 20 | Poland | 829 | 21,545 |
| 21 | Lithuania | 816 | 21,222 |
| 22 | Slovakia | 813 | 21,141 |
| 23 | Sweden | 792 | 20,590 |
| 24 | Czech Republic | 777 | 20,203 |
| 25 | Spain | 776 | 20,187 |
| 26 | France | 768 | 19,963 |
| 27 | Latvia | 765 | 19,894 |
| 28 | Chile | 758 | 19,714 |
| 29 | Belgium | 752 | 19,552 |
| 30 | Romania | 661 | 17,182 |
| 31 | Bulgaria | 657 | 17,072 |
| 32 | Turkey | 571 | 14,846 |
| 33 | United Kingdom | 514 | 13,358 |
| 34 | South Africa | 471 | 12,236 |
| 35 | United States | 445 | 11,575 |
| 36 | Russia | 445 | 11,572 |
| 37 | Brazil | 298 | 7,756 |
| 38 | Norway | 246 | 6,399 |
| 39 | China | 241 | 6,266 |
| 40 | Mexico | 190 | 4,927 |
| 41 | Argentina | 170 | 4,408 |
| 42 | India | 98 | 2,554 |

* kaufkraftbereinigt in Relation zu den United States; real zu Preisen des Jahres 2000; gerundete Werte

Source: Prognos 2018

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2.3.2 Globalization-induced per capita income gains compared to the baseline level

The analysis above shows that emerging countries have benefited from globalization to a much lesser extent than is suggested by the public discussions on the above-average strong export growth or the relocation of production facilities to emerging economies such as India and China.

A somewhat different picture is produced when, as opposed to the main results in Table 4, the per capita income gains are viewed in relation to the baseline level of per capita gross domestic product (Table 6). Countries with a low to middle income in 1990 and a systematic opening afterwards occupy the top places according to this criterion. The per capita income gains due to globalization since 1990 are more than five times higher in China than its per capita economic output in the baseline year. China leads this list, followed at some distance by Hungary, South Korea and Chile. The Central Eastern European nations also achieve higher places than in the absolute assessment of income gains.

Industrialized countries with a high level of globalization and income at the beginning of the analyzed period performed significantly worse. The United States and Norway occupy the last two places. They reported relatively low absolute income gains due to globalization, which are also relativized by the high per capita gross domestic product in 1990. Germany lands in the middle.

Even with this approach, Central American and South American emerging countries do not make it to the top. Their absolute income gains due to globalization are overcompensated by relatively high baseline values for per capita gross domestic product in 1990. Per capita economic output in Mexico and Argentina at the beginning of the analyzed period was about the same as in the Czech Republic and well above the levels of the Baltic countries. India occupies a place in the middle. Although the South Asian emerging country had by far the lowest per capita gross domestic product of all 42 countries in 1990, which significantly raises its place in the ranking, it also simultaneously reported the lowest absolute per capita income gains (Table 4), which also means solely a place in the middle overall in this alternative ranking.

TABLE 6 Globalization-induced per capita income gains from 1990 to 2016 compared to per capita GDP in 1990

| Ranking | Country | Cumulative per capita income gains compared to per capita GDP in 1990, in % |
|---------|----------------|---|
| 1 | China | 518 % |
| 2 | Hungary | 356 % |
| 3 | South Korea | 352 % |
| 4 | Chile | 327 % |
| 5 | Poland | 290 % |
| 6 | Slovenia | 290 % |
| 7 | Romania | 268 % |
| 8 | Estonia | 263 % |
| 9 | Bulgaria | 258 % |
| 10 | Portugal | 239 % |
| 11 | Greece | 232 % |
| 12 | Ireland | 231 % |
| 13 | Latvia | 205 % |
| 14 | Slovakia | 199 % |
| 15 | Lithuania | 193 % |
| 16 | Israel | 189 % |
| 17 | Turkey | 189 % |
| 18 | India | 184 % |
| 19 | Finland | 182 % |
| 20 | South Africa | 156 % |
| 21 | Germany | 148 % |
| 22 | Netherlands | 141 % |
| 23 | Switzerland | 139 % |
| 24 | Czech Republic | 133 % |
| 25 | Denmark | 122 % |
| 26 | New Zealand | 121 % |
| 27 | Austria | 119 % |
| 28 | Spain | 118 % |
| 29 | Italy | 118 % |
| 30 | Russia | 115 % |
| 31 | Australia | 114 % |
| 32 | Japan | 113 % |
| 33 | Canada | 97 % |
| 34 | Brazil | 95 % |
| 35 | France | 90 % |
| 36 | Belgium | 85 % |
| 37 | Sweden | 84 % |
| 38 | United Kingdom | 63 % |
| 39 | Mexico | 56 % |
| 40 | Argentina | 51 % |
| 41 | United States | 39 % |
| 42 | Norway | 23 % |

Source: Prognos 2018

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2.3.3 Globalization-induced income gains at the country level

Table 7 shows the aggregate income gains for the entire economy due to globalization. The population is not taken into account in this analysis. Thus, it is not surprising that only populous nations occupy the top places. Japan leads the field with income gains of €191 billion on average per year due to globalization. These income gains add up to just under €5 trillion over the entire analysis period from 1990 to 2016. The United States occupies 2nd place with income gains of around €130 billion p.a. China and Germany follow in 3rd and 4th place with €105 billion and €94 billion p.a. The rear is brought up by the small Baltic economies.

Measured by these income gains due to globalization on the country level, it is therefore above all the large industrialized countries that have profited significantly from the increase in globalization. The fact that the emerging countries do not occupy the top places, contrary to public perception, is also connected with the analyzed period. On the one hand, the selection of the analyzed period (1990 to 2016) leads to the calculation of income gains due to globalization based on the low gross domestic product there in 1990. On the other hand, the strong opening in China and India took place only from the middle of the 1990s or after the turn of the millennium. However, it is important that the global interrelationships increase, especially in the first years of the analyzed period, for high cumulative income gains due to globalization.

TABLE 7 Average and cumulative income gains due to globalization at the national level between 1990 and 2016

| Ranking | Country | Average annual income gain from 1990 onwards in billions of euro* | Cumulative income gain from 1990 onwards in billions of euro* |
|---------|----------------|---|---|
| 1 | Japan | 191.1 | 4,968 |
| 2 | United States | 129.3 | 3,363 |
| 3 | China | 105.1 | 2,733 |
| 4 | Germany | 94.2 | 2,449 |
| 5 | Italy | 45.2 | 1,176 |
| 6 | South Korea | 44.4 | 1,154 |
| 7 | France | 41.7 | 1,083 |
| 8 | United Kingdom | 33.5 | 870 |
| 9 | India | 26.3 | 683 |
| 10 | Canada | 24.5 | 638 |
| 11 | Brazil | 23.4 | 608 |
| 12 | Spain | 23.1 | 599 |
| 13 | Turkey | 17.9 | 464 |
| 14 | Netherlands | 17.7 | 460 |
| 15 | Russia | 17.5 | 456 |
| 16 | Australia | 16.1 | 420 |
| 17 | Switzerland | 14.5 | 378 |
| 18 | Mexico | 13.8 | 359 |
| 19 | Poland | 13.3 | 347 |
| 20 | Greece | 9.7 | 253 |
| 21 | South Africa | 9.3 | 241 |
| 22 | Portugal | 8.5 | 221 |
| 23 | Israel | 8.4 | 218 |
| 24 | Austria | 7.4 | 194 |
| 25 | Finland | 7.4 | 194 |
| 26 | Sweden | 7.3 | 190 |
| 27 | Chile | 6.7 | 173 |
| 28 | Belgium | 6.7 | 173 |
| 29 | Denmark | 6.3 | 163 |
| 30 | Ireland | 5.4 | 140 |
| 31 | Hungary | 5.4 | 140 |
| 32 | Argentina | 4.0 | 104 |
| 33 | Romania | 3.9 | 101 |
| 34 | Czech Republic | 3.0 | 78 |
| 35 | New Zealand | 2.2 | 58 |
| 36 | Slovakia | 2.1 | 54 |
| 37 | Slovenia | 1.9 | 50 |
| 38 | Bulgaria | 1.2 | 32 |
| 39 | Norway | 1.2 | 31 |
| 40 | Lithuania | 1.0 | 26 |
| 41 | Estonia | 0.6 | 17 |
| 42 | Latvia | 0.6 | 16 |

* Actual prices in 2000; rounded values

Source: Prognos 2018

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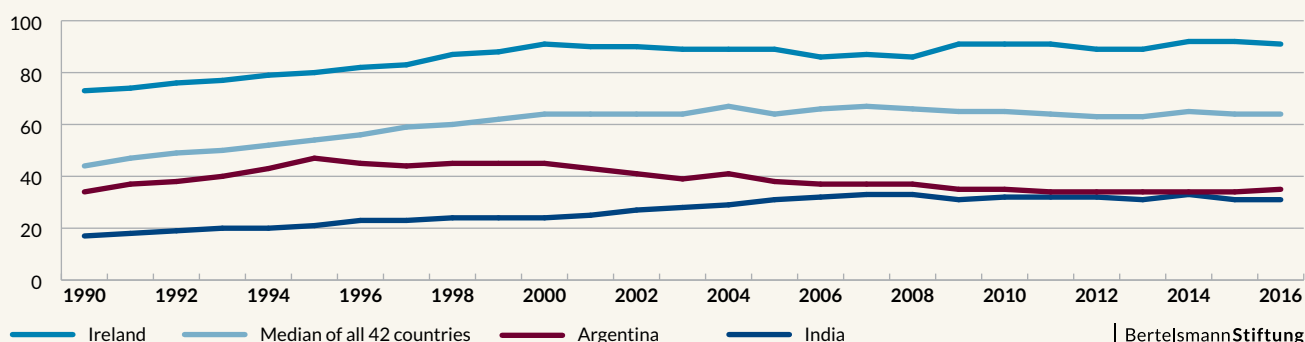
3 Country factsheets

3.1 Argentina



Crisis-stricken Argentina is the least globalized country in the report after India. Its international economic ties have steadily declined since 1995. Per capita GDP gains are low, but higher than in other emerging countries.

Globalization index for Argentina in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)



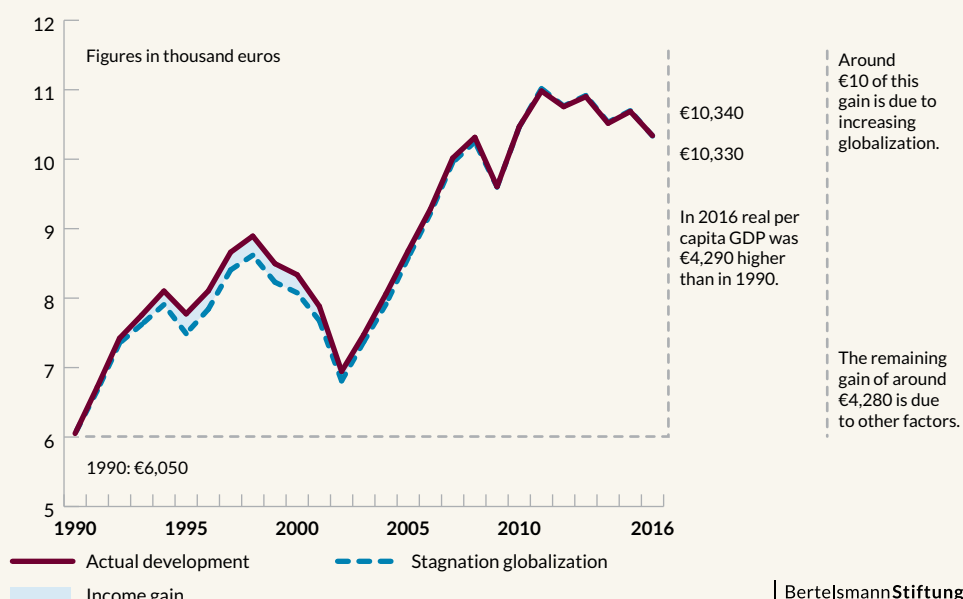
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Scores in the globalization index and the three sub-indices for Argentina

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 34 | 37 | 38 | 40 | 43 | 47 | 45 | 44 | 45 | 45 | 45 | 43 | 41 |
| Economy | 22 | 24 | 23 | 26 | 28 | 34 | 31 | 28 | 28 | 27 | 27 | 24 | 22 |
| Social | 32 | 32 | 33 | 37 | 38 | 41 | 43 | 45 | 49 | 50 | 51 | 50 | 49 |
| Politics | 73 | 80 | 85 | 88 | 90 | 91 | 90 | 91 | 91 | 91 | 92 | 93 | 92 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 39 | 41 | 38 | 37 | 37 | 37 | 35 | 35 | 34 | 34 | 34 | 34 | 34 | 35 |
| Economy | 18 | 21 | 17 | 14 | 14 | 13 | 10 | 9 | 7 | 9 | 8 | 9 | 9 | 9 |
| Social | 47 | 48 | 48 | 48 | 48 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 | 52 |
| Politics | 93 | 92 | 92 | 92 | 94 | 93 | 93 | 94 | 94 | 94 | 94 | 93 | 93 | 93 |

Development of real per capita GDP in Argentina with and without increasing globalization



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Average GDP gain per year and inhabitant

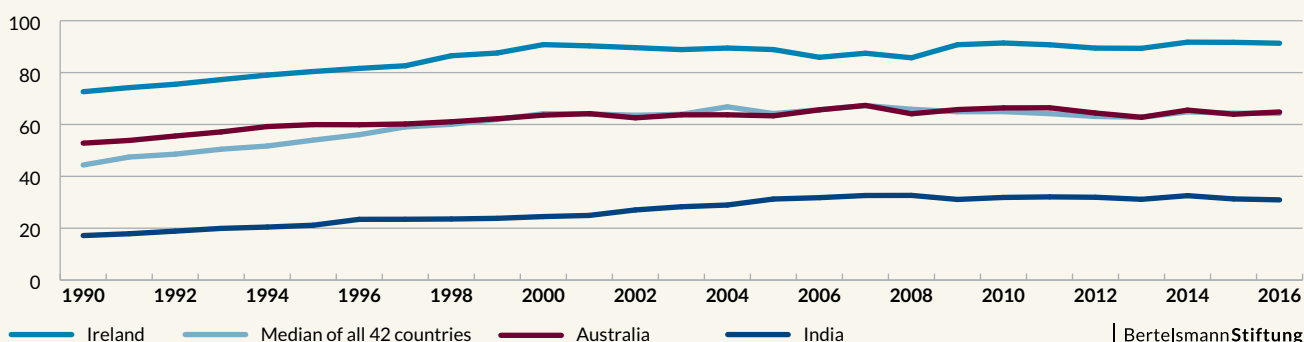
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.2 Australia



Australia's globalization has developed similarly to the median for all 42 countries. Low commodity prices have fueled structural change since 2012 and slowed trade. Australia is in the middle in terms of per capita income gains.

Globalization index for Australia in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

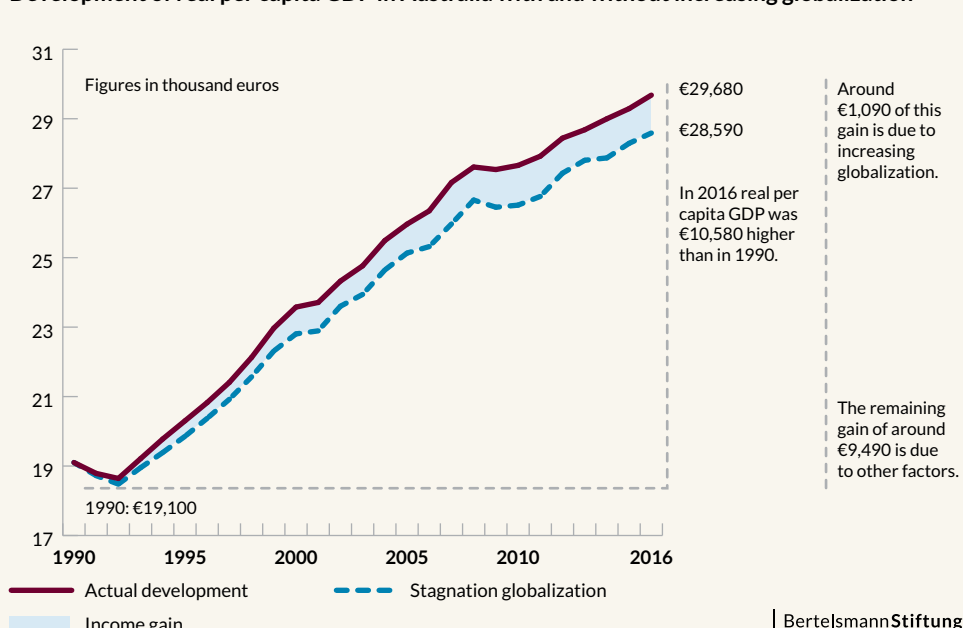


Scores in the globalization index and the three sub-indices for Australia

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 53 | 54 | 56 | 57 | 59 | 60 | 60 | 60 | 61 | 62 | 64 | 64 | 63 |
| Economy | 34 | 35 | 36 | 38 | 41 | 42 | 43 | 43 | 44 | 46 | 46 | 47 | 45 |
| Social | 83 | 82 | 83 | 84 | 86 | 85 | 85 | 86 | 88 | 89 | 90 | 90 | 89 |
| Politics | 80 | 82 | 87 | 88 | 88 | 88 | 84 | 85 | 86 | 85 | 90 | 91 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 64 | 64 | 63 | 66 | 67 | 64 | 66 | 66 | 66 | 64 | 63 | 66 | 64 | 65 |
| Economy | 46 | 47 | 46 | 50 | 52 | 47 | 50 | 51 | 51 | 47 | 45 | 49 | 47 | 48 |
| Social | 90 | 89 | 90 | 90 | 90 | 90 | 90 | 90 | 89 | 89 | 89 | 89 | 89 | 89 |
| Politics | 89 | 88 | 87 | 89 | 90 | 90 | 90 | 91 | 90 | 91 | 91 | 91 | 91 | 91 |

Development of real per capita GDP in Australia with and without increasing globalization



Average GDP gain per year and inhabitant

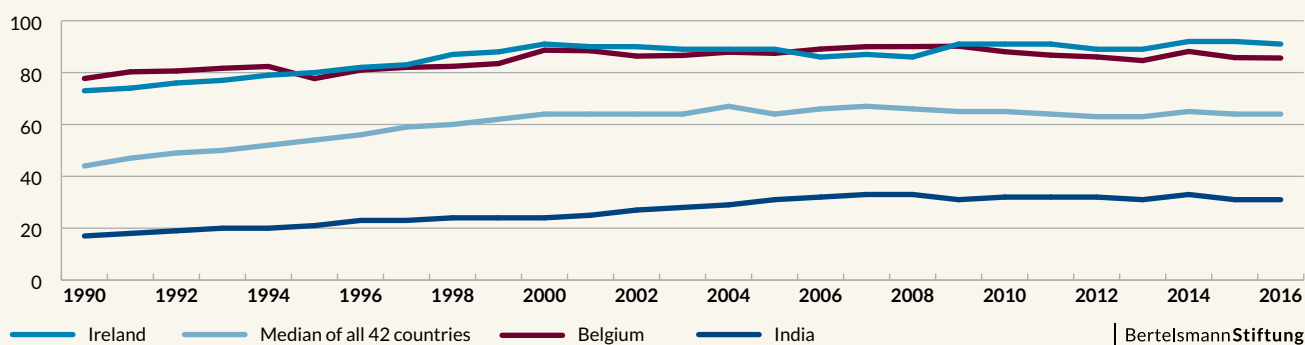
| Ranking | Country | In € |
|---------|------------------|------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 16. | Australia | 768 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.3 Belgium



Belgium is among the most globalized economies in the report. In 1990 it had the highest degree of globalization among all 42 countries. The small increase in the index since then means this country only reaches the midfield with regard to per capita income gains.

Globalization index for Belgium in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

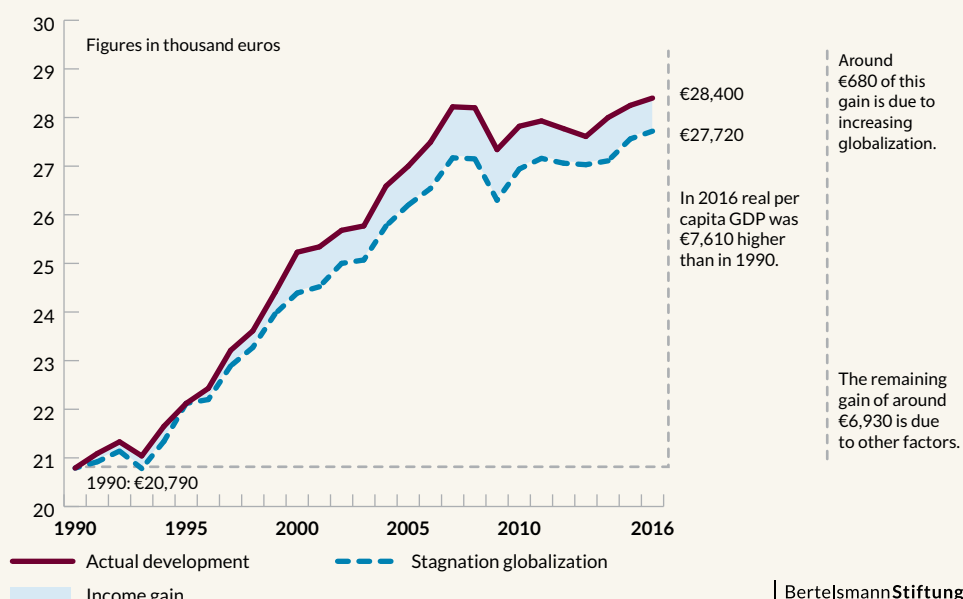


Scores in the globalization index and the three sub-indices for Belgium

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 78 | 80 | 81 | 82 | 82 | 78 | 81 | 82 | 82 | 83 | 89 | 88 | 86 |
| Economy | 76 | 78 | 75 | 76 | 76 | 67 | 72 | 74 | 76 | 77 | 85 | 85 | 81 |
| Social | 75 | 78 | 80 | 82 | 85 | 87 | 89 | 89 | 90 | 91 | 93 | 92 | 93 |
| Politics | 85 | 90 | 97 | 99 | 99 | 99 | 99 | 100 | 94 | 94 | 95 | 95 | 94 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 87 | 88 | 87 | 89 | 90 | 90 | 90 | 88 | 87 | 86 | 85 | 88 | 86 | 86 |
| Economy | 82 | 83 | 83 | 84 | 85 | 85 | 85 | 82 | 80 | 79 | 76 | 83 | 79 | 78 |
| Social | 94 | 95 | 95 | 96 | 96 | 96 | 96 | 96 | 97 | 97 | 97 | 96 | 96 | 96 |
| Politics | 94 | 94 | 94 | 97 | 99 | 99 | 99 | 98 | 97 | 98 | 98 | 97 | 97 | 97 |

Development of real per capita GDP in Belgium with and without increasing globalization



Average GDP gain per year and inhabitant

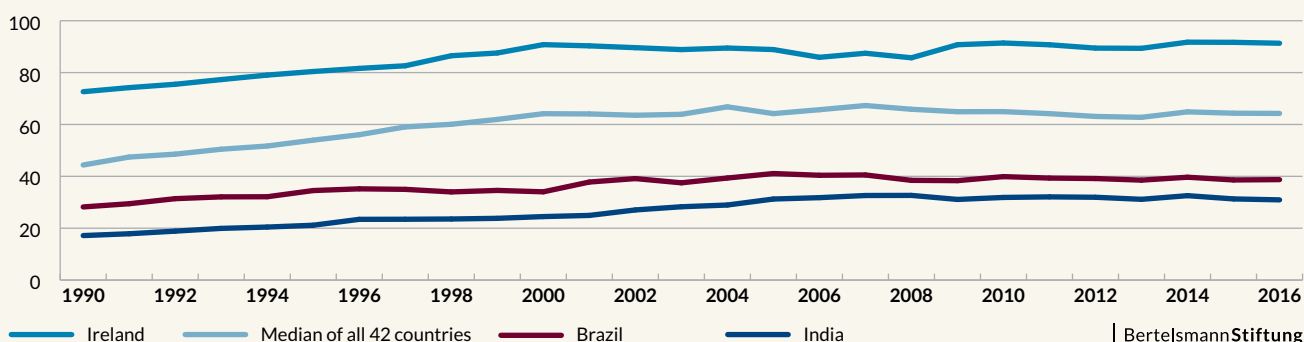
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 19. | Belgium | 624 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.4 Brazil



Brazil has a low degree of globalization. The country is hardly connected internationally, particularly in economic and social terms. The gains in per capita income due to globalization are also low on account of the low baseline level.

Globalization index for Brazil in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)



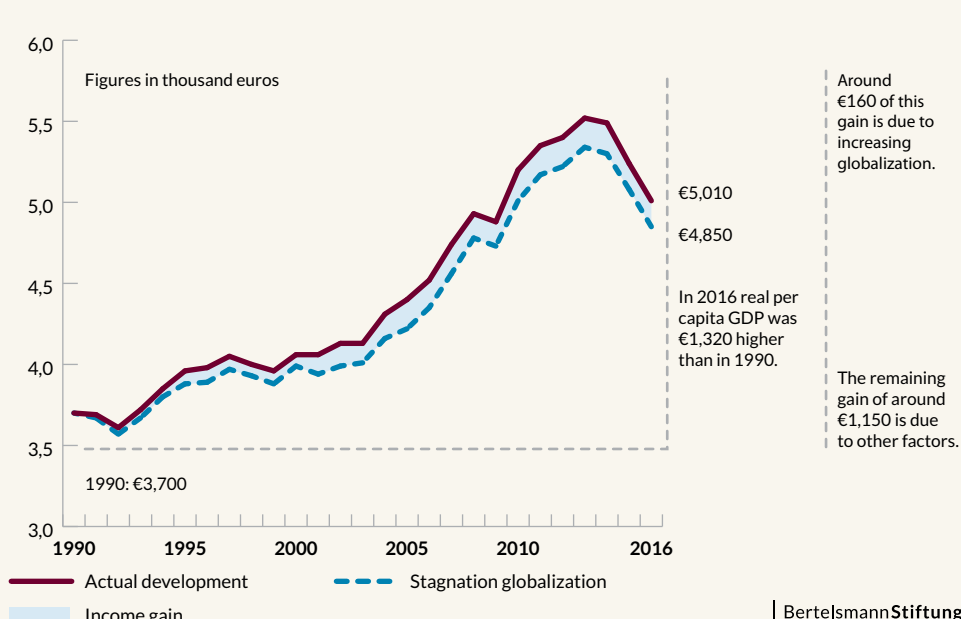
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Scores in the globalization index and the three sub-indices for Brazil

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 28 | 29 | 31 | 32 | 32 | 35 | 35 | 35 | 34 | 35 | 34 | 38 | 39 |
| Economy | 16 | 15 | 16 | 16 | 16 | 19 | 18 | 17 | 15 | 15 | 15 | 21 | 23 |
| Social | 24 | 24 | 27 | 28 | 28 | 32 | 35 | 38 | 39 | 40 | 40 | 39 | 39 |
| Politics | 70 | 79 | 82 | 83 | 85 | 85 | 88 | 87 | 86 | 86 | 86 | 86 | 86 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 37 | 39 | 41 | 40 | 41 | 38 | 38 | 40 | 39 | 39 | 39 | 40 | 39 | 39 |
| Economy | 21 | 23 | 25 | 24 | 24 | 20 | 19 | 21 | 20 | 19 | 18 | 20 | 18 | 18 |
| Social | 39 | 39 | 39 | 39 | 40 | 41 | 41 | 42 | 42 | 43 | 43 | 44 | 44 | 44 |
| Politics | 86 | 90 | 91 | 91 | 92 | 93 | 93 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |

Development of real per capita GDP in Brazil with and without increasing globalization



| BertelsmannStiftung

Average GDP gain per year and inhabitant

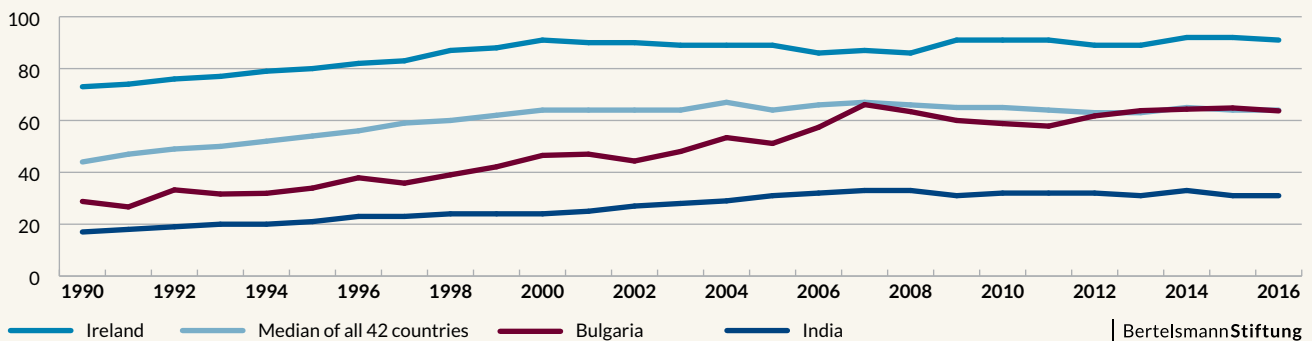
| Ranking | Country | In € |
|---------|---------------|------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 37. | Brazil | 166 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.5 Bulgaria



Bulgaria, which was still very regionally focussed in 1990, has become increasingly globalized. The main driver has been the economic dimension of globalization. Absolute per capita GDP gains are nonetheless lower than in any other EU country.

Globalization index for Bulgaria in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

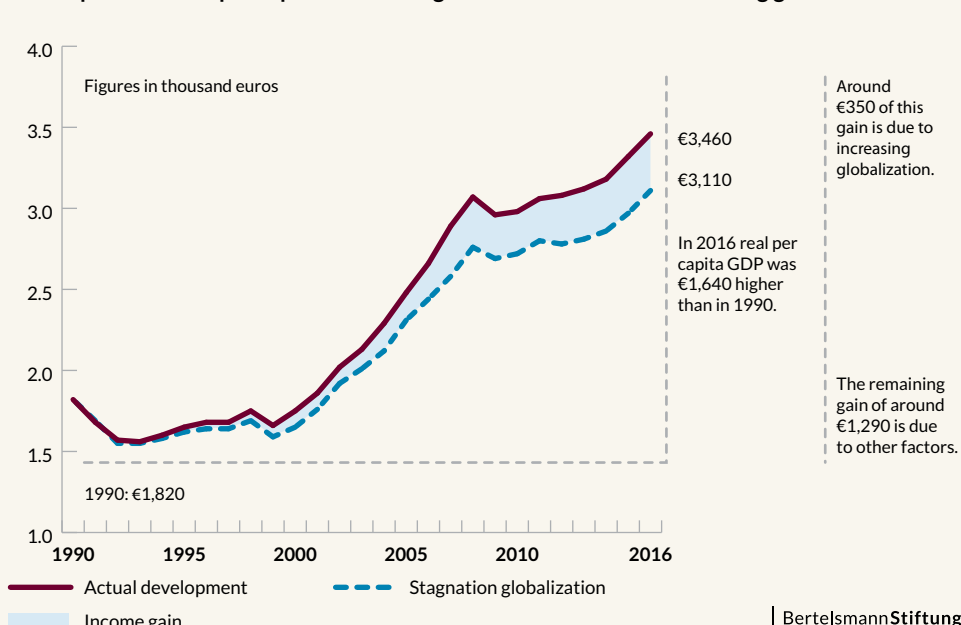


Scores in the globalization index and the three sub-indices for Bulgaria

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 29 | 27 | 33 | 32 | 32 | 34 | 38 | 36 | 39 | 42 | 47 | 47 | 44 |
| Economy | 28 | 24 | 26 | 21 | 24 | 19 | 23 | 20 | 24 | 27 | 33 | 33 | 27 |
| Social | 20 | 20 | 20 | 20 | 35 | 37 | 40 | 39 | 40 | 46 | 50 | 52 | 55 |
| Politics | 42 | 43 | 69 | 74 | 54 | 75 | 80 | 81 | 82 | 84 | 85 | 85 | 86 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 48 | 53 | 51 | 57 | 66 | 63 | 60 | 59 | 58 | 62 | 64 | 64 | 65 | 64 |
| Economy | 33 | 42 | 39 | 48 | 62 | 56 | 52 | 51 | 50 | 50 | 53 | 55 | 56 | 54 |
| Social | 55 | 56 | 56 | 58 | 58 | 60 | 59 | 59 | 58 | 74 | 74 | 74 | 74 | 74 |
| Politics | 87 | 85 | 84 | 86 | 86 | 89 | 85 | 82 | 82 | 84 | 85 | 83 | 83 | 83 |

Development of real per capita GDP in Bulgaria with and without increasing globalization



Average GDP gain per year and inhabitant

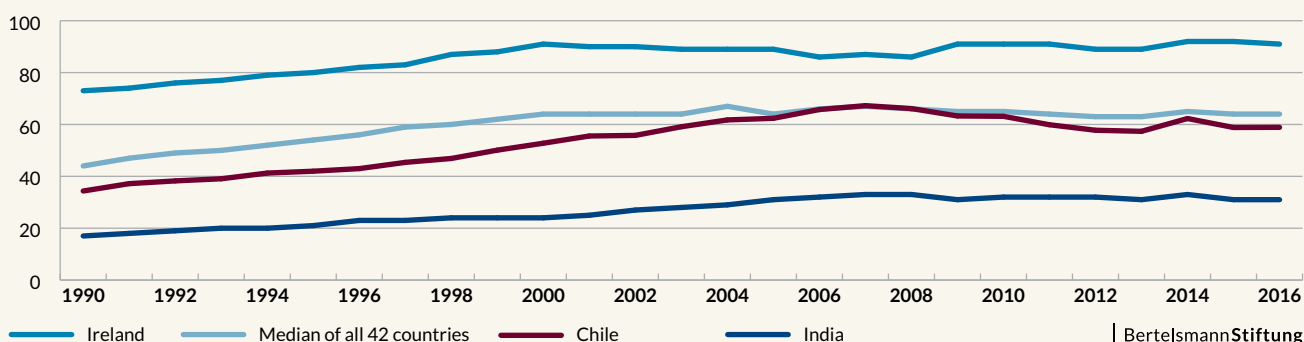
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 36. | Bulgaria | 166 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.6 Chile



Chile's globalization index nearly doubled between 1990 and the global financial crisis in 2008. This trend has not continued since. Nonetheless, the South American country's per capita GDP achieves the highest globalization-induced gains of all emerging countries.

Globalization index for Chile in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

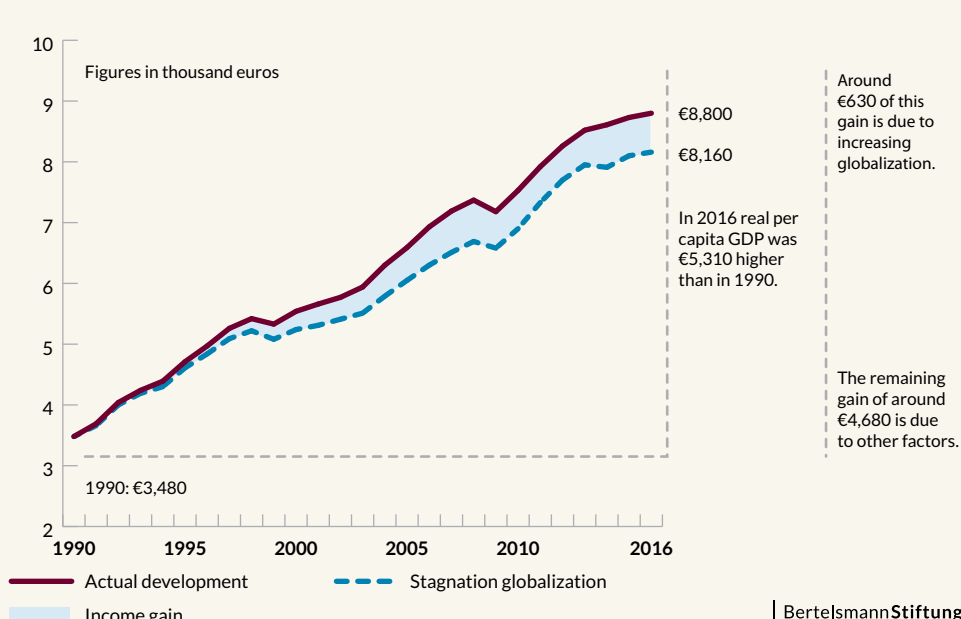


Scores in the globalization index and the three sub-indices for Chile

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 34 | 37 | 38 | 39 | 41 | 42 | 43 | 45 | 47 | 50 | 53 | 56 | 56 |
| Economy | 24 | 26 | 26 | 26 | 29 | 29 | 30 | 33 | 35 | 39 | 43 | 47 | 49 |
| Social | 37 | 39 | 41 | 44 | 46 | 49 | 50 | 51 | 52 | 52 | 53 | 53 | 52 |
| Politics | 61 | 70 | 73 | 74 | 73 | 74 | 74 | 77 | 78 | 81 | 82 | 83 | 82 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 59 | 62 | 62 | 66 | 67 | 66 | 63 | 63 | 60 | 58 | 57 | 62 | 59 | 59 |
| Economy | 55 | 58 | 59 | 63 | 65 | 63 | 58 | 58 | 53 | 49 | 49 | 57 | 51 | 51 |
| Social | 50 | 50 | 50 | 53 | 54 | 53 | 52 | 52 | 53 | 52 | 52 | 51 | 51 | 51 |
| Politics | 81 | 85 | 86 | 86 | 88 | 88 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |

Development of real per capita GDP in Chile with and without increasing globalization



Average GDP gain per year and inhabitant

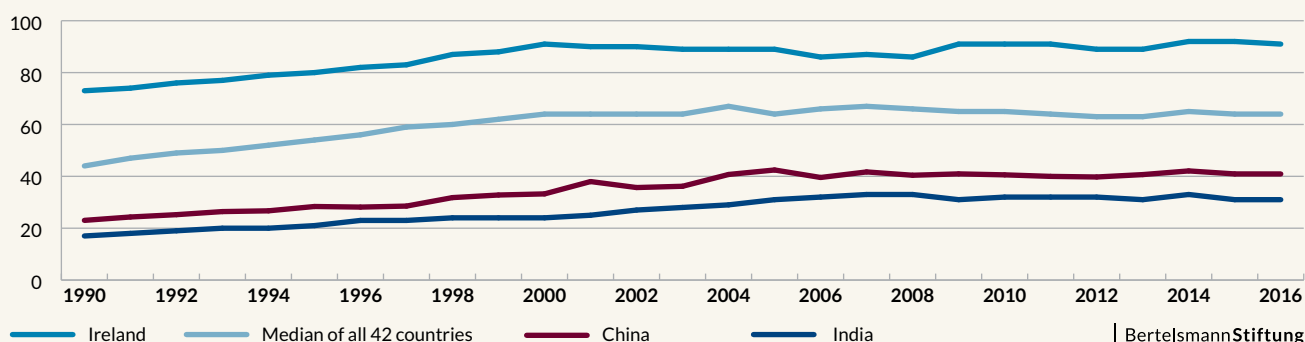
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 26. | Chile | 403 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.7 China



China occupies one of the lowest places in the globalization index and in terms of absolute per capita GDP gains. While the long-standing world champion in exports has become increasingly open socially and politically, the metrics for financial market integration and trade barriers fluctuate.

Globalization index for China in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

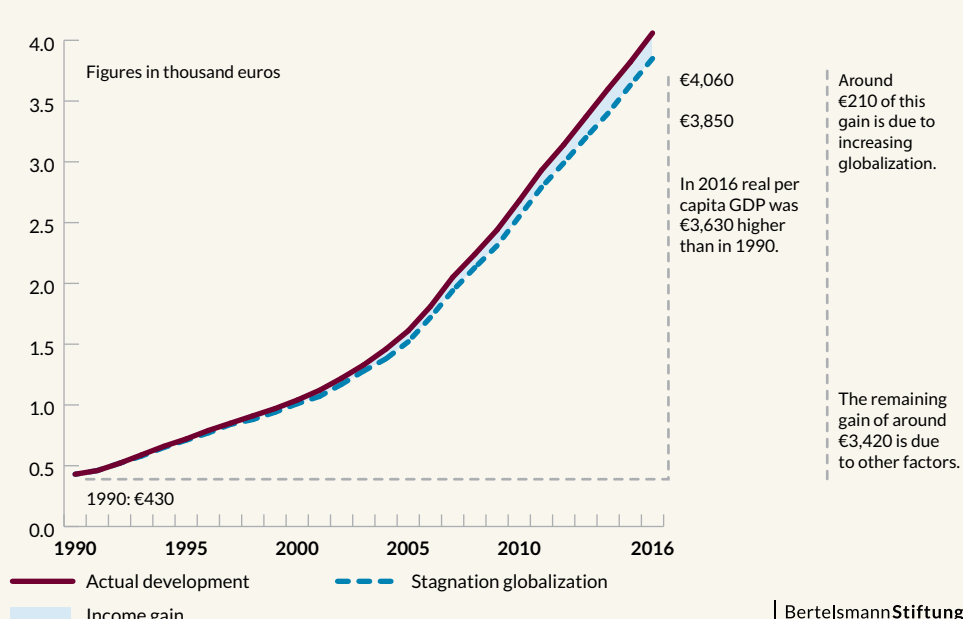


Scores in the globalization index and the three sub-indices for China

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 23 | 24 | 25 | 26 | 27 | 28 | 28 | 29 | 32 | 33 | 33 | 38 | 36 |
| Economy | 16 | 16 | 17 | 18 | 18 | 19 | 18 | 17 | 16 | 16 | 16 | 23 | 19 |
| Social | 15 | 16 | 16 | 16 | 17 | 20 | 21 | 24 | 42 | 45 | 46 | 47 | 48 |
| Politics | 52 | 57 | 59 | 62 | 63 | 66 | 67 | 69 | 69 | 72 | 72 | 75 | 75 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 36 | 41 | 42 | 40 | 42 | 40 | 41 | 41 | 40 | 40 | 41 | 42 | 41 | 41 |
| Economy | 18 | 25 | 27 | 22 | 24 | 22 | 23 | 22 | 21 | 21 | 22 | 24 | 22 | 22 |
| Social | 49 | 50 | 52 | 52 | 52 | 53 | 53 | 53 | 52 | 53 | 53 | 54 | 54 | 54 |
| Politics | 76 | 78 | 79 | 82 | 83 | 83 | 84 | 84 | 85 | 84 | 84 | 84 | 84 | 84 |

Development of real per capita GDP in China with and without increasing globalization



Average GDP gain per year and inhabitant

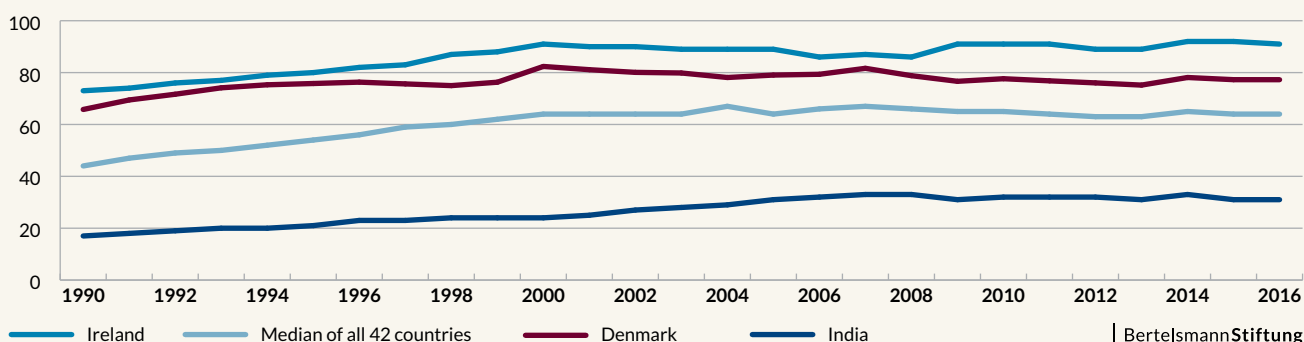
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.8 Denmark



Denmark occupies top positions in both the globalization index and in terms of the per capita income gains resulting from this. Relatively low trade barriers in the traditionally export-oriented Scandinavian economy as well as other factors contribute to this.

Globalization index for Denmark in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

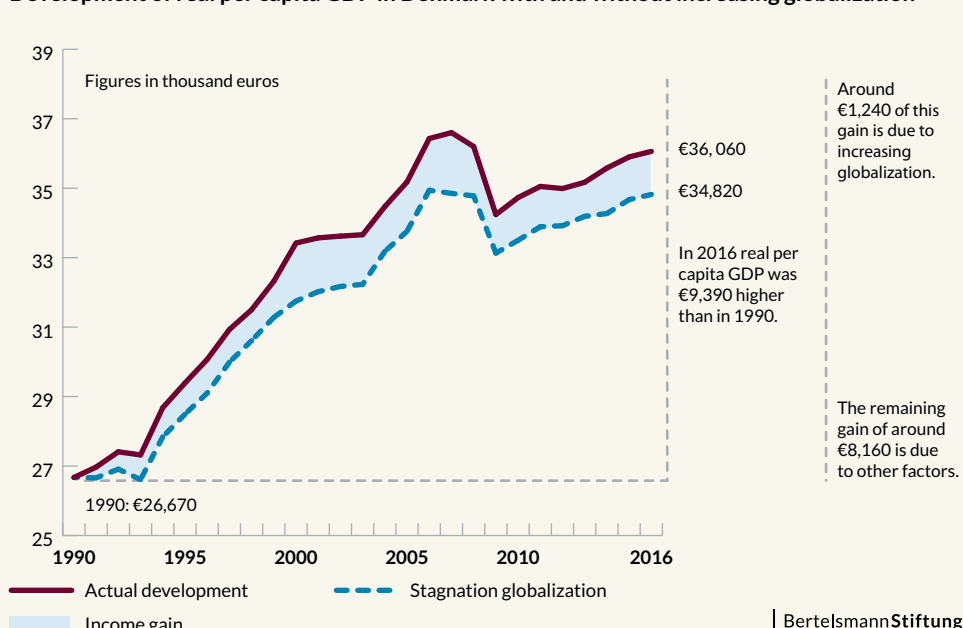


Scores in the globalization index and the three sub-indices for Denmark

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 66 | 69 | 72 | 74 | 75 | 76 | 76 | 76 | 75 | 76 | 82 | 81 | 80 |
| Economy | 56 | 60 | 62 | 66 | 67 | 67 | 68 | 66 | 65 | 67 | 76 | 73 | 72 |
| Social | 76 | 78 | 79 | 81 | 83 | 85 | 85 | 87 | 88 | 89 | 93 | 94 | 93 |
| Politics | 83 | 89 | 92 | 93 | 94 | 93 | 92 | 93 | 93 | 92 | 93 | 94 | 93 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 80 | 78 | 79 | 79 | 82 | 79 | 77 | 78 | 77 | 76 | 75 | 78 | 77 | 77 |
| Economy | 71 | 68 | 69 | 70 | 73 | 69 | 65 | 67 | 65 | 65 | 63 | 68 | 67 | 67 |
| Social | 94 | 94 | 95 | 95 | 94 | 94 | 94 | 93 | 93 | 94 | 93 | 93 | 93 | 93 |
| Politics | 92 | 93 | 93 | 93 | 95 | 94 | 94 | 95 | 94 | 92 | 92 | 94 | 94 | 94 |

Development of real per capita GDP in Denmark with and without increasing globalization



Average GDP gain per year and inhabitant

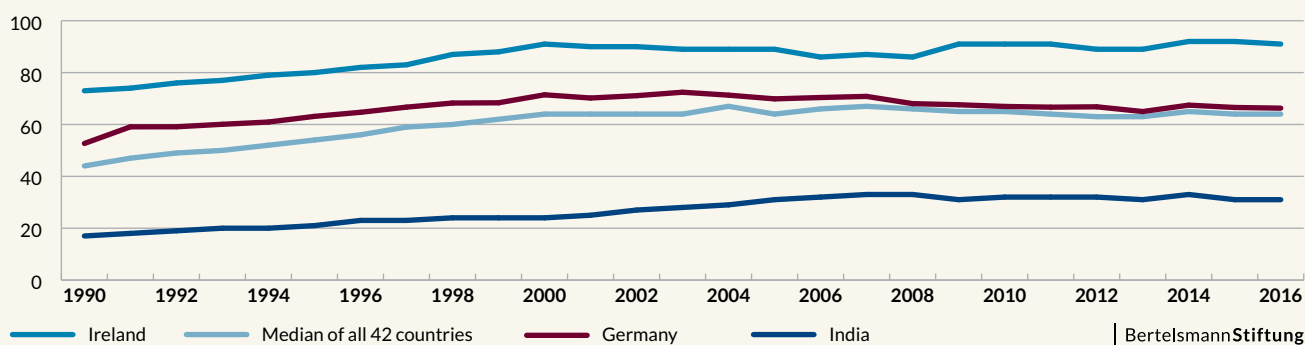
| Ranking | Country | In € |
|---------|----------------|--------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 7. | Denmark | 1.150 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.9 Germany



Germany's globalization is average in comparison to other countries. Despite growth since 2013, the pre-crisis level of economic integration has not yet been reached. The country falls in the top group in terms of per capita income gains.

Globalization index for Germany in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

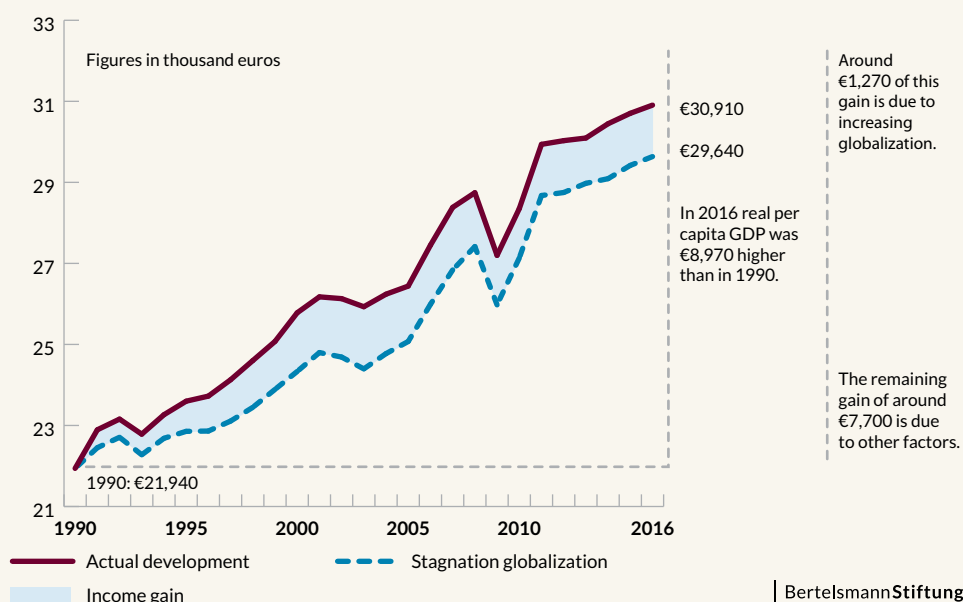


Scores in the globalization index and the three sub-indices for Germany

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 53 | 59 | 59 | 60 | 61 | 63 | 65 | 67 | 68 | 68 | 71 | 70 | 71 |
| Economy | 51 | 51 | 49 | 49 | 50 | 52 | 54 | 56 | 57 | 56 | 60 | 58 | 59 |
| Social | 71 | 76 | 77 | 78 | 79 | 80 | 81 | 83 | 85 | 87 | 89 | 89 | 89 |
| Politics | 40 | 67 | 71 | 76 | 77 | 80 | 82 | 83 | 85 | 86 | 87 | 88 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 72 | 71 | 70 | 70 | 71 | 68 | 68 | 67 | 67 | 67 | 65 | 67 | 67 | 66 |
| Economy | 61 | 59 | 56 | 57 | 57 | 52 | 52 | 51 | 50 | 50 | 47 | 51 | 50 | 50 |
| Social | 90 | 90 | 91 | 90 | 91 | 91 | 91 | 91 | 90 | 91 | 91 | 91 | 91 | 91 |
| Politics | 89 | 89 | 90 | 91 | 93 | 92 | 92 | 93 | 92 | 92 | 93 | 92 | 92 | 92 |

Development of real per capita GDP in Germany with and without increasing globalization



Average GDP gain per year and inhabitant

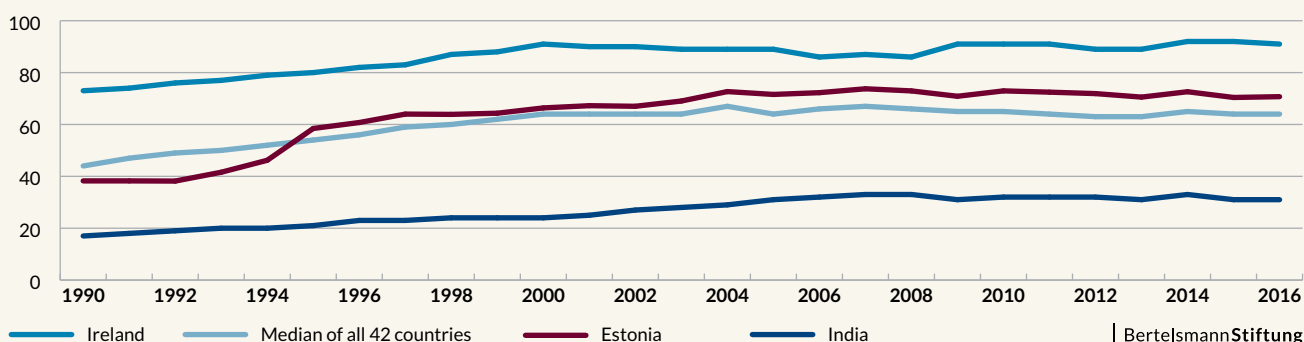
| Ranking | Country | In € |
|---------|----------------|--------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 6. | Germany | 1.151 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.10 Estonia



Estonia's global integration has increased economically, socially and politically. The associated per capita income gains are higher than in most other former Eastern Bloc countries. Estonia ranks in the middle here relative to other countries.

Globalization index for Estonia in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)



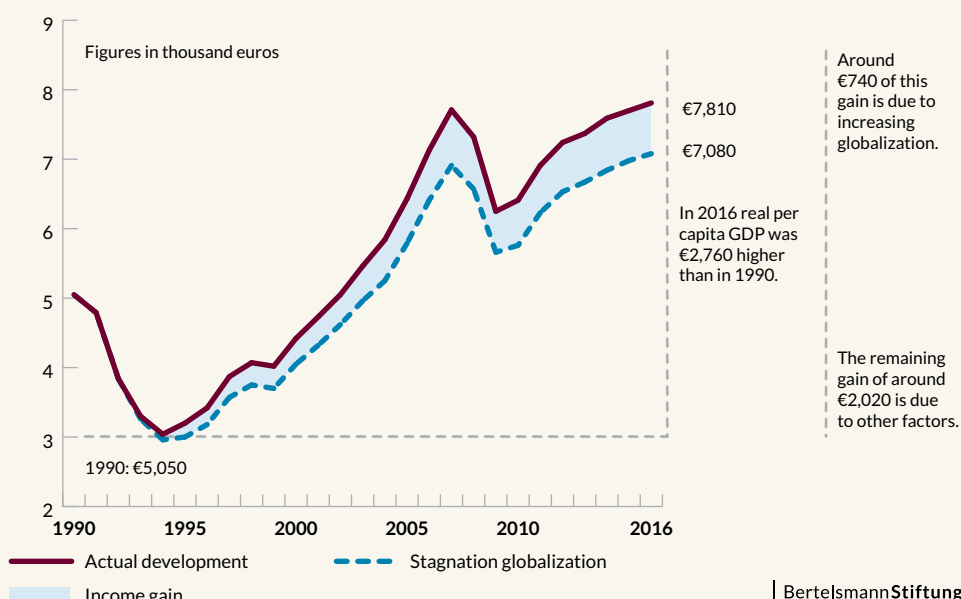
| BertelsmannStiftung

Scores in the globalization index and the three sub-indices for Estonia

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 38 | 38 | 38 | 42 | 46 | 58 | 61 | 64 | 64 | 64 | 66 | 67 | 67 |
| Economy | 49 | 49 | 47 | 51 | 56 | 63 | 66 | 69 | 68 | 67 | 69 | 70 | 69 |
| Social | 45 | 45 | 45 | 46 | 49 | 63 | 66 | 66 | 69 | 70 | 72 | 72 | 74 |
| Politics | 0 | 0 | 5 | 8 | 14 | 39 | 41 | 48 | 48 | 50 | 52 | 55 | 56 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 69 | 73 | 72 | 72 | 74 | 73 | 71 | 73 | 72 | 72 | 71 | 73 | 70 | 71 |
| Economy | 71 | 76 | 74 | 74 | 76 | 73 | 69 | 73 | 71 | 70 | 68 | 71 | 67 | 68 |
| Social | 74 | 74 | 74 | 75 | 76 | 76 | 76 | 77 | 77 | 77 | 77 | 77 | 77 | 77 |
| Politics | 57 | 62 | 62 | 65 | 66 | 69 | 70 | 70 | 72 | 73 | 73 | 74 | 74 | 74 |

Development of real per capita GDP in Estonia with and without increasing globalization



| BertelsmannStiftung

Average GDP gain per year and inhabitant

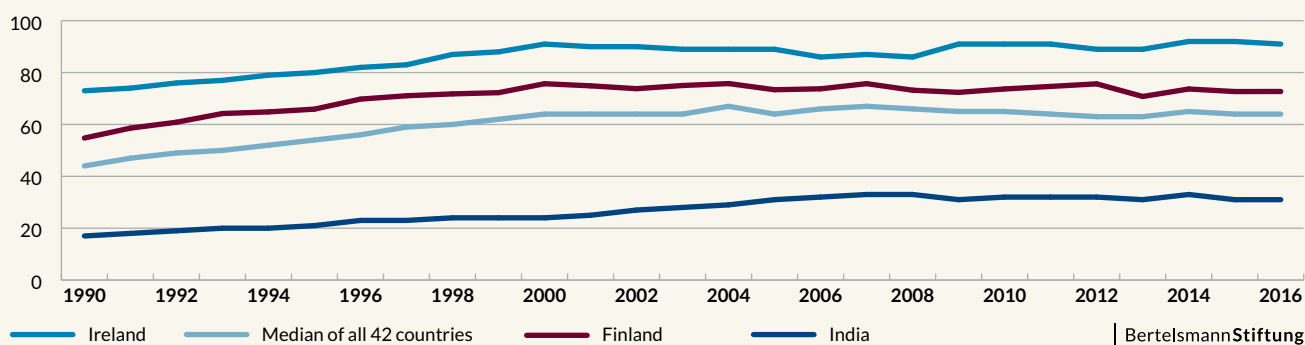
| Ranking | Country | In € |
|---------|----------------|------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 24. | Estonia | 471 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.11 Finland



Per capita income gains show that Finland has benefited from globalization more than any other country (3rd place), precisely because it networked early on. Since the turn of the millennium, the globalization index has remained relatively stable and at a high level.

Globalization index for Finland in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

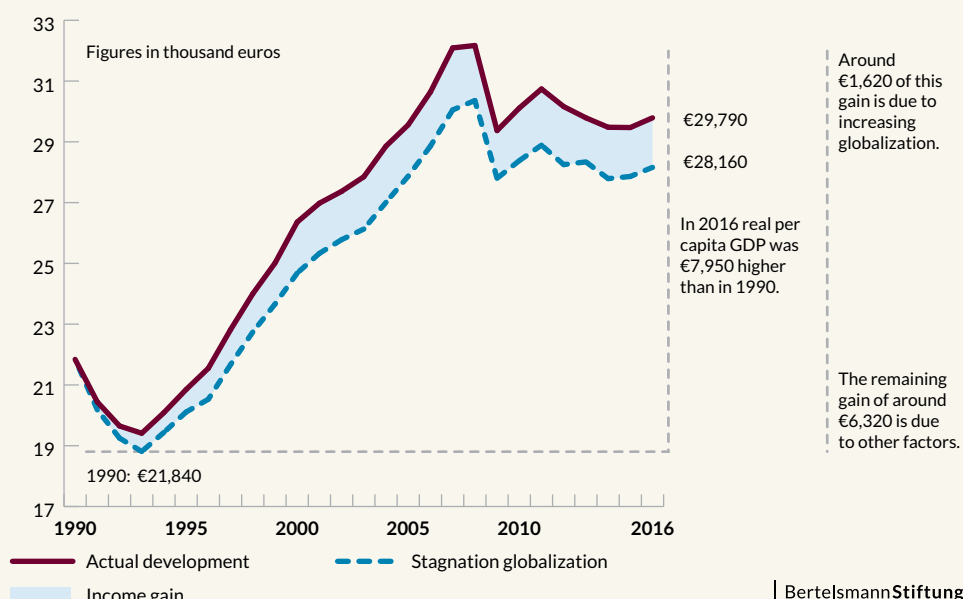


Scores in the globalization index and the three sub-indices for Finland

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 55 | 59 | 61 | 64 | 65 | 66 | 70 | 71 | 72 | 72 | 76 | 75 | 74 |
| Economy | 46 | 49 | 52 | 57 | 57 | 57 | 58 | 59 | 60 | 61 | 67 | 65 | 63 |
| Social | 58 | 60 | 60 | 61 | 63 | 66 | 84 | 86 | 87 | 86 | 88 | 88 | 90 |
| Politics | 77 | 87 | 88 | 90 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 92 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 75 | 76 | 73 | 74 | 76 | 73 | 72 | 74 | 75 | 76 | 71 | 74 | 73 | 73 |
| Economy | 65 | 65 | 63 | 63 | 66 | 62 | 61 | 63 | 65 | 66 | 58 | 62 | 61 | 61 |
| Social | 90 | 90 | 89 | 89 | 90 | 90 | 89 | 90 | 90 | 89 | 89 | 89 | 89 | 89 |
| Politics | 91 | 94 | 88 | 90 | 92 | 90 | 91 | 90 | 89 | 91 | 92 | 93 | 93 | 93 |

Development of real per capita GDP in Finland with and without increasing globalization



Average GDP gain per year and inhabitant

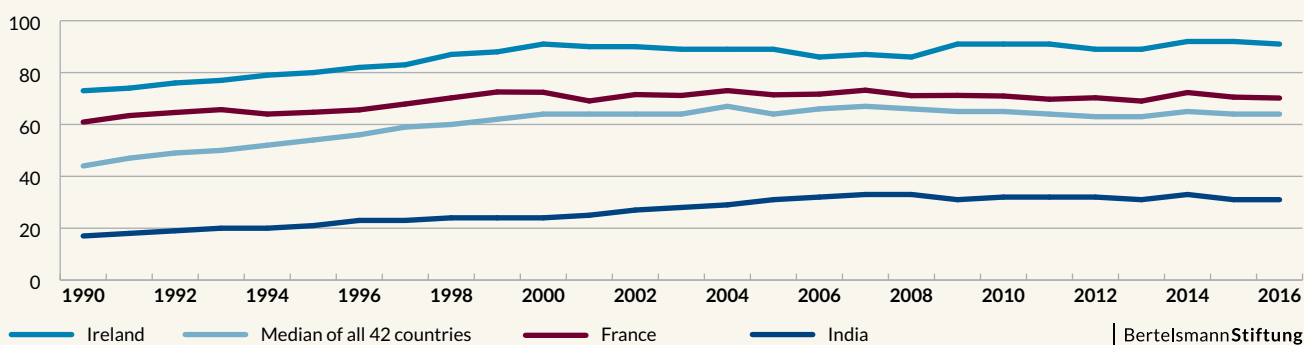
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.12 France



France is globalized to a slightly above-average degree. An important driver is political globalization, which is more pronounced than for any other of the 42 countries. France is in the midfield in terms of income gains due to globalization.

Globalization index for France in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

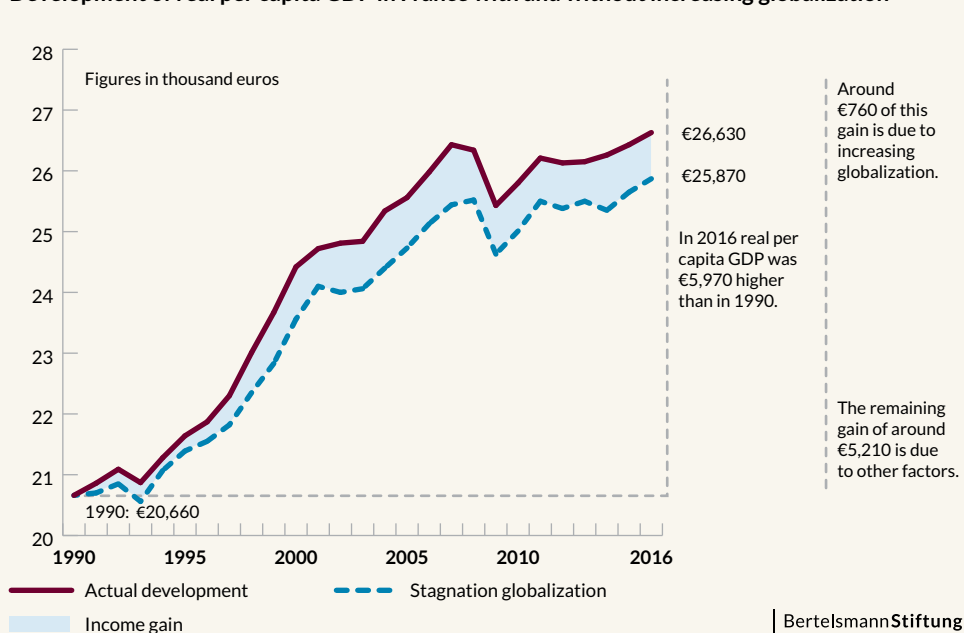


Scores in the globalization index and the three sub-indices for France

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 61 | 63 | 65 | 66 | 64 | 65 | 66 | 68 | 70 | 73 | 72 | 69 | 72 |
| Economy | 47 | 48 | 49 | 50 | 46 | 47 | 49 | 52 | 56 | 60 | 59 | 53 | 57 |
| Social | 75 | 77 | 78 | 79 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 89 |
| Politics | 90 | 95 | 98 | 100 | 100 | 100 | 97 | 97 | 98 | 97 | 97 | 98 | 97 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 71 | 73 | 71 | 72 | 73 | 71 | 71 | 71 | 70 | 70 | 69 | 72 | 71 | 70 |
| Economy | 57 | 60 | 56 | 56 | 58 | 55 | 55 | 54 | 52 | 53 | 51 | 57 | 54 | 53 |
| Social | 89 | 89 | 91 | 91 | 92 | 92 | 93 | 93 | 93 | 93 | 93 | 93 | 93 | 93 |
| Politics | 97 | 97 | 98 | 98 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |

Development of real per capita GDP in France with and without increasing globalization



Average GDP gain per year and inhabitant

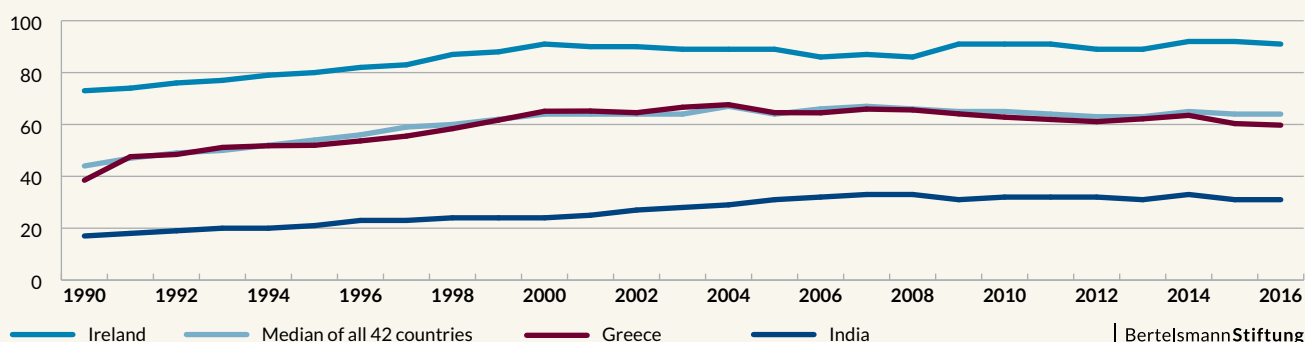
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 18. | France | 659 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.13 Greece



Crisis-stricken Greece is now one of the least globalized economies in the EU. Nonetheless, because the country had already opened up to global markets at the beginning of the 1990s, significant per capita GDP gains have been achieved over time.

Globalization index for Greece in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

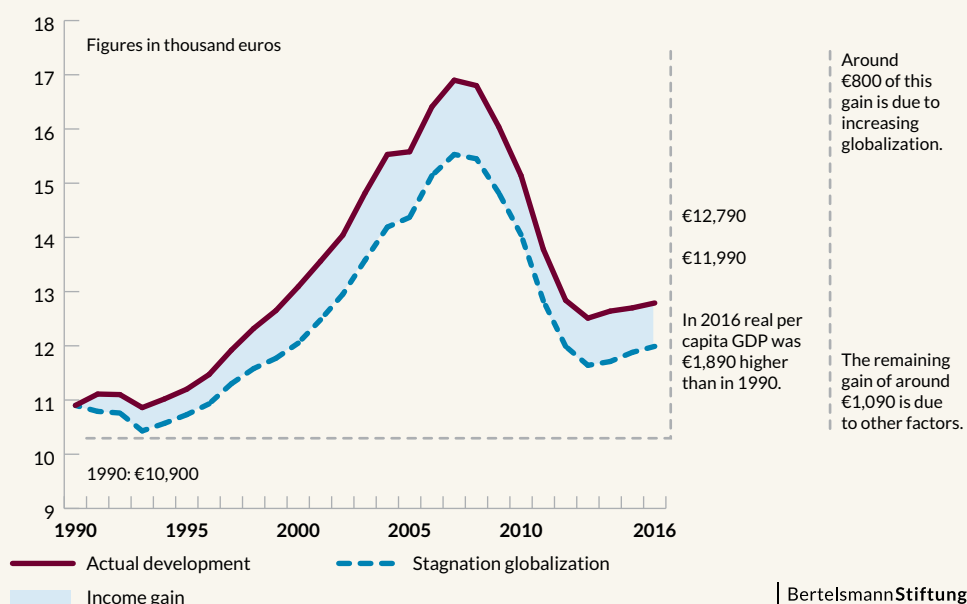


Scores in the globalization index and the three sub-indices for Greece

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 38 | 48 | 48 | 51 | 52 | 52 | 54 | 56 | 58 | 62 | 65 | 65 | 65 |
| Economy | 34 | 35 | 36 | 37 | 37 | 38 | 40 | 42 | 46 | 51 | 57 | 51 | 50 |
| Social | 41 | 54 | 53 | 59 | 61 | 62 | 64 | 65 | 65 | 68 | 68 | 84 | 85 |
| Politics | 48 | 78 | 81 | 86 | 85 | 84 | 85 | 86 | 87 | 87 | 87 | 88 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 67 | 68 | 65 | 64 | 66 | 66 | 64 | 63 | 62 | 61 | 62 | 64 | 60 | 60 |
| Economy | 53 | 55 | 49 | 49 | 50 | 49 | 47 | 45 | 44 | 43 | 44 | 47 | 42 | 41 |
| Social | 85 | 85 | 86 | 85 | 86 | 87 | 86 | 86 | 86 | 86 | 85 | 85 | 85 | 85 |
| Politics | 90 | 89 | 89 | 91 | 93 | 94 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |

Development of real per capita GDP in Greece with and without increasing globalization



Average GDP gain per year and inhabitant

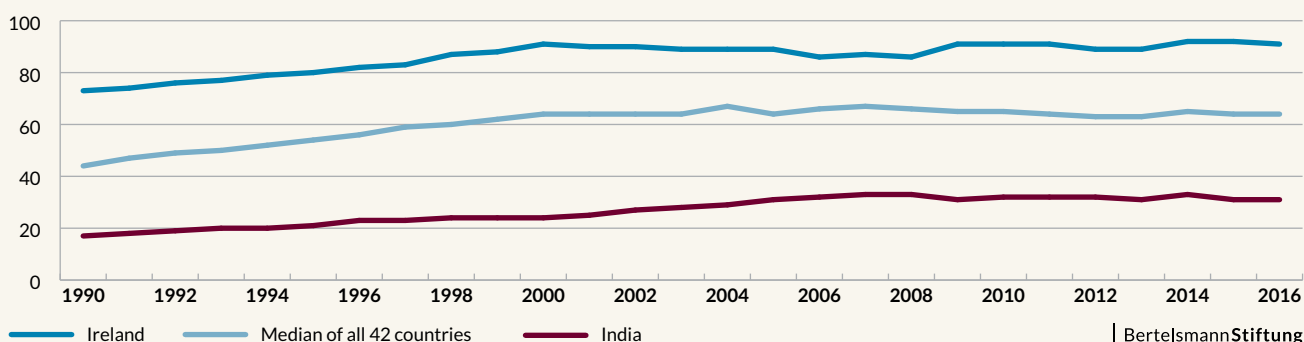
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 12. | Greece | 894 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.14 India



India is at the bottom of the 42 countries in the globalization index and with regard to per capita income gains due to globalization. India's GDP gains are low in absolute terms, despite steadily increasing economic integration through the end of the 2000s.

Globalization index for India (lowest score in 2016) in comparison to Ireland (highest score in 2016)

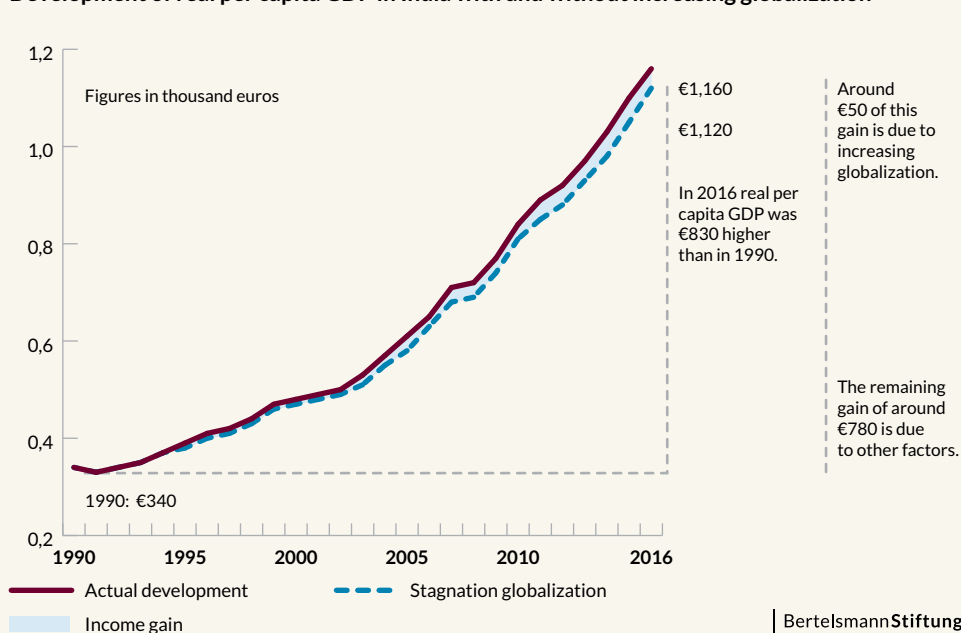


Scores in the globalization index and the three sub-indices for India

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 17 | 18 | 19 | 20 | 20 | 21 | 23 | 23 | 24 | 24 | 24 | 25 | 27 |
| Economy | 5 | 5 | 5 | 5 | 5 | 6 | 5 | 5 | 5 | 4 | 4 | 5 | 8 |
| Social | 0 | 1 | 2 | 2 | 3 | 7 | 19 | 20 | 21 | 22 | 23 | 24 | 24 |
| Politics | 70 | 72 | 77 | 81 | 83 | 82 | 83 | 83 | 83 | 84 | 86 | 87 | 86 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 28 | 29 | 31 | 32 | 33 | 33 | 31 | 32 | 32 | 32 | 31 | 33 | 31 | 31 |
| Economy | 10 | 11 | 15 | 14 | 15 | 16 | 13 | 14 | 14 | 14 | 12 | 15 | 13 | 12 |
| Social | 24 | 24 | 24 | 27 | 26 | 25 | 25 | 25 | 26 | 26 | 26 | 26 | 26 | 26 |
| Politics | 87 | 86 | 88 | 90 | 91 | 91 | 91 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |

Development of real per capita GDP in India with and without increasing globalization



Average GDP gain per year and inhabitant

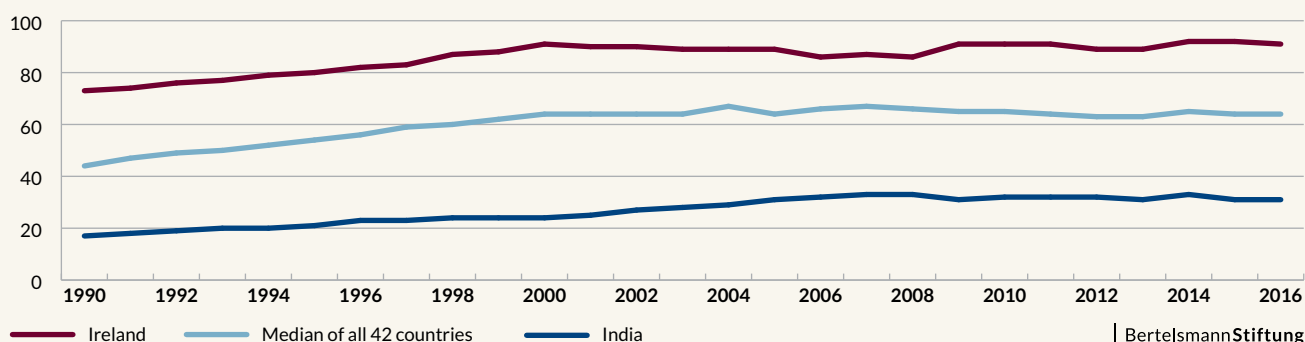
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.15 Ireland



Ireland is the most globalized economy in the report. The country is highly integrated, especially in global capital markets. In terms of political integration Ireland is only in the midfield. Per capita income gains due to globalization are high.

Globalization index for Ireland (highest score in 2016) in comparison to India (lowest score in 2016)

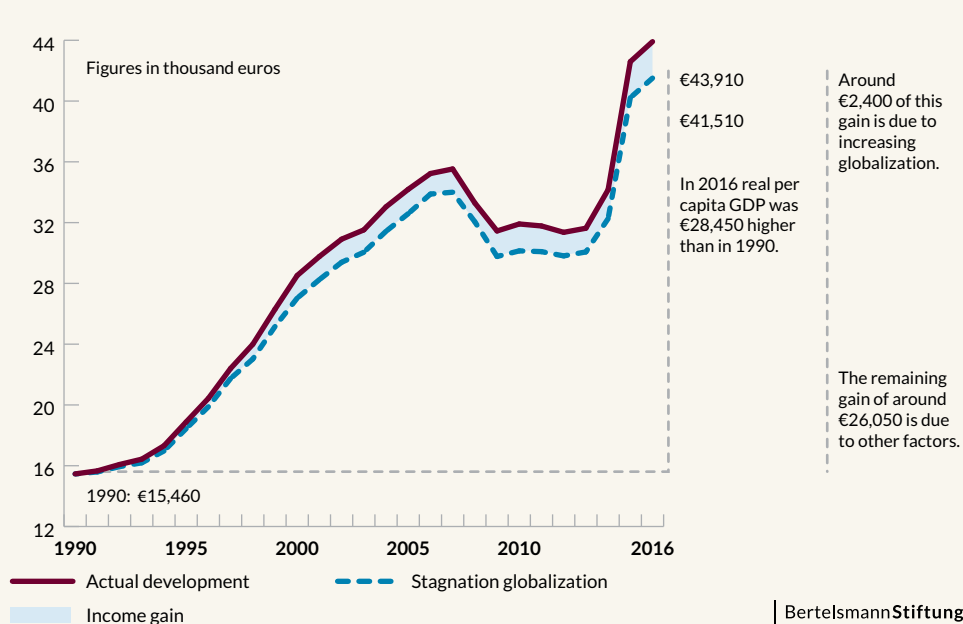


Scores in the globalization index and the three sub-indices for Ireland

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 73 | 74 | 76 | 77 | 79 | 80 | 82 | 83 | 87 | 88 | 91 | 90 | 90 |
| Economy | 77 | 78 | 78 | 80 | 82 | 83 | 84 | 85 | 91 | 91 | 96 | 95 | 93 |
| Social | 65 | 66 | 67 | 68 | 69 | 71 | 73 | 74 | 76 | 78 | 78 | 79 | 80 |
| Politics | 67 | 72 | 75 | 79 | 81 | 82 | 83 | 85 | 84 | 86 | 86 | 87 | 88 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 89 | 89 | 89 | 86 | 87 | 86 | 91 | 91 | 91 | 89 | 89 | 92 | 92 | 91 |
| Economy | 92 | 93 | 92 | 87 | 89 | 87 | 88 | 90 | 88 | 86 | 86 | 90 | 90 | 90 |
| Social | 81 | 80 | 81 | 82 | 81 | 82 | 99 | 98 | 98 | 97 | 97 | 97 | 97 | 97 |
| Politics | 87 | 87 | 88 | 87 | 89 | 87 | 91 | 89 | 91 | 91 | 91 | 91 | 91 | 91 |

Development of real per capita GDP in Ireland with and without increasing globalization



Average GDP gain per year and inhabitant

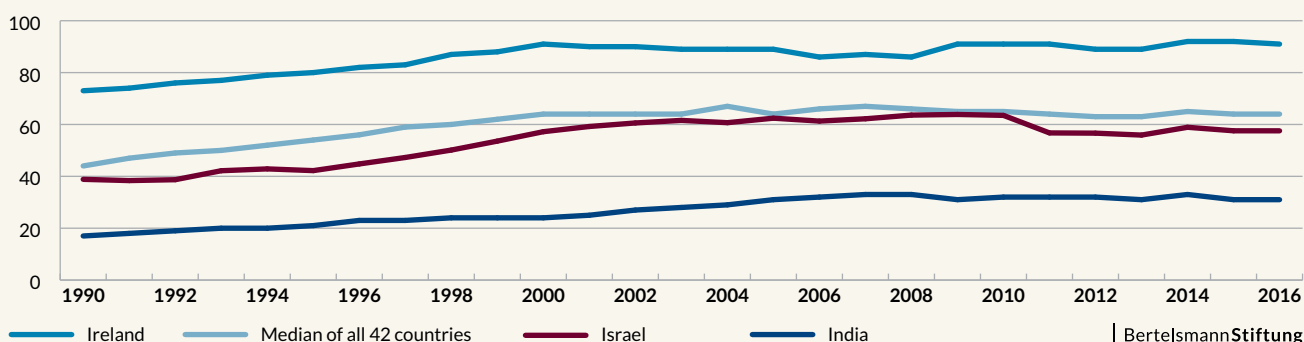
| Ran-king | Country | In € |
|----------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.16 Israel



Israel is one of the less globalized economies, which is partly due to its complex international politics. Per capita GDP is still high due to the high baseline level and a strong globalization push around 2000.

Globalization index for Israel in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

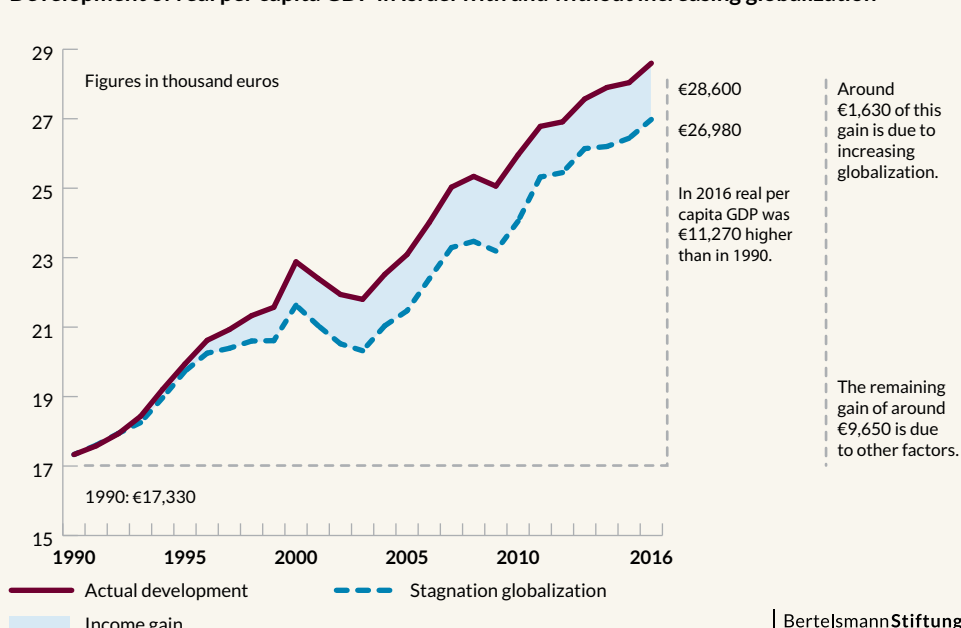


Scores in the globalization index and the three sub-indices for Israel

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 39 | 38 | 39 | 42 | 43 | 42 | 45 | 47 | 50 | 54 | 57 | 59 | 61 |
| Economy | 37 | 35 | 35 | 36 | 36 | 34 | 37 | 41 | 45 | 50 | 56 | 54 | 57 |
| Social | 41 | 43 | 43 | 55 | 57 | 60 | 62 | 63 | 65 | 65 | 65 | 80 | 79 |
| Politics | 42 | 45 | 46 | 48 | 49 | 50 | 51 | 51 | 52 | 52 | 52 | 52 | 53 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 62 | 61 | 62 | 61 | 62 | 64 | 64 | 64 | 57 | 57 | 56 | 59 | 58 | 58 |
| Economy | 58 | 56 | 59 | 57 | 58 | 53 | 54 | 53 | 47 | 47 | 46 | 52 | 49 | 49 |
| Social | 79 | 80 | 80 | 80 | 81 | 81 | 80 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Politics | 53 | 55 | 56 | 57 | 57 | 77 | 78 | 79 | 62 | 61 | 61 | 59 | 59 | 59 |

Development of real per capita GDP in Israel with and without increasing globalization



Average GDP gain per year and inhabitant

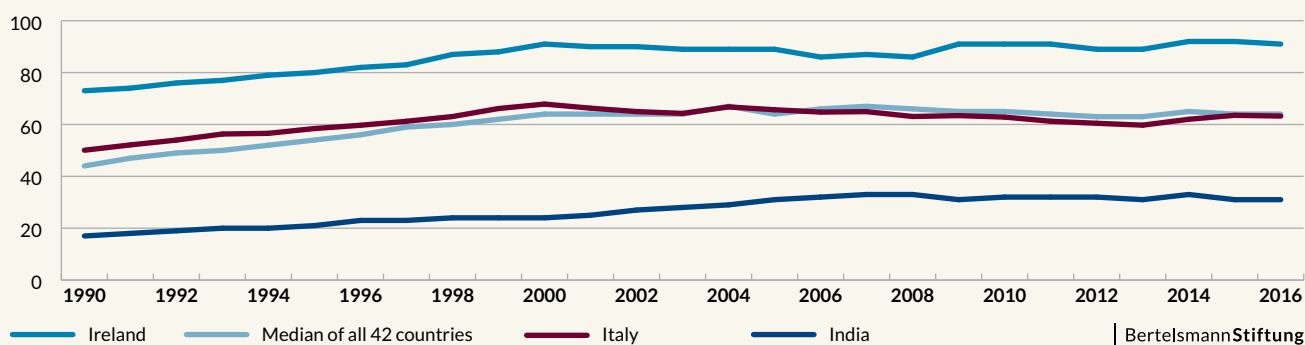
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.17 Italy



Italy ranks in the midfield in terms of the level of globalization and the resulting per capita income gains. The Southern European EU country's economic dimension is much weaker than the social and political globalization.

Globalization index for Italy in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

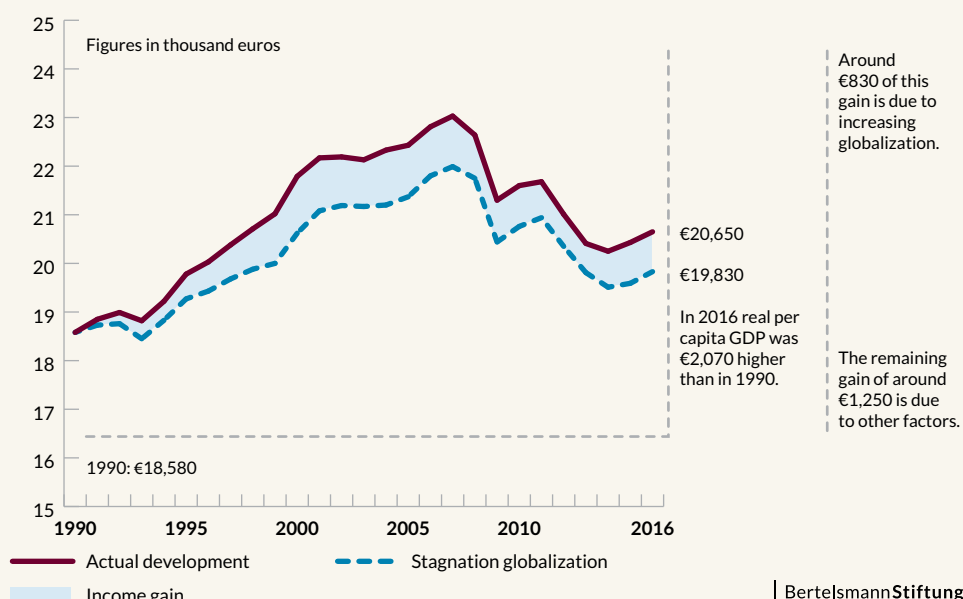


Scores in the globalization index and the three sub-indices for Italy

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 50 | 52 | 54 | 56 | 57 | 58 | 60 | 61 | 63 | 66 | 68 | 66 | 65 |
| Economy | 35 | 36 | 38 | 40 | 41 | 44 | 45 | 47 | 49 | 52 | 54 | 51 | 49 |
| Social | 60 | 62 | 64 | 63 | 64 | 67 | 69 | 70 | 72 | 80 | 82 | 82 | 82 |
| Politics | 84 | 90 | 93 | 97 | 96 | 93 | 93 | 94 | 95 | 95 | 95 | 96 | 96 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 64 | 67 | 66 | 65 | 65 | 63 | 63 | 63 | 61 | 60 | 60 | 62 | 64 | 63 |
| Economy | 48 | 52 | 50 | 48 | 48 | 44 | 45 | 44 | 41 | 40 | 39 | 43 | 45 | 45 |
| Social | 82 | 82 | 82 | 82 | 82 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 | 83 |
| Politics | 96 | 95 | 96 | 98 | 99 | 100 | 100 | 99 | 99 | 99 | 99 | 99 | 99 | 99 |

Development of real per capita GDP in Italy with and without increasing globalization



Average GDP gain per year and inhabitant

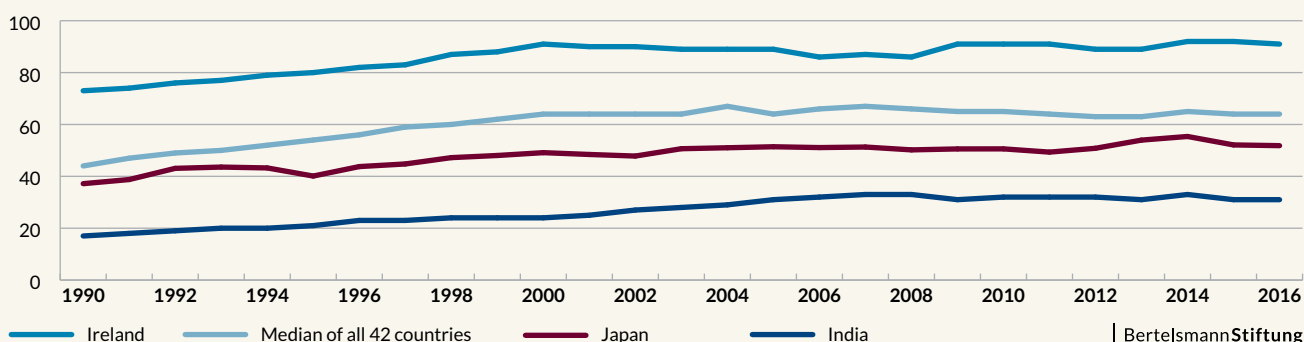
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 15. | Italy | 778 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.18 Japan



The highest per capita income gains due to globalization after the leader Switzerland are found for Japan, despite its low level of globalization. A high level of GDP in 1990 and Japan's increasing globalization since 2012 have contributed to this.

Globalization index for Japan in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)



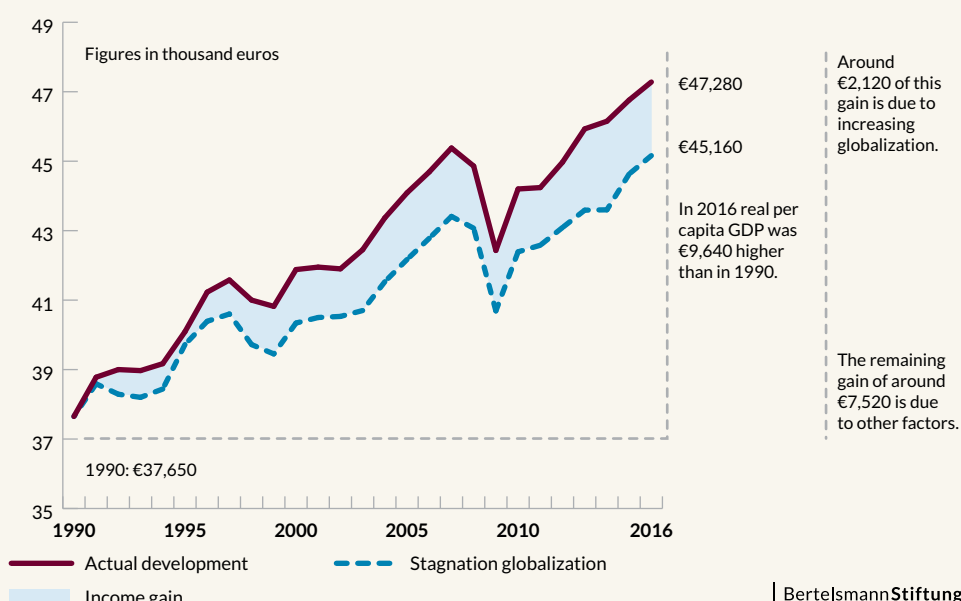
| BertelsmannStiftung

Scores in the globalization index and the three sub-indices for Japan

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 37 | 39 | 43 | 44 | 43 | 40 | 44 | 45 | 47 | 48 | 49 | 48 | 48 |
| Economy | 32 | 32 | 32 | 31 | 31 | 31 | 30 | 32 | 33 | 35 | 36 | 35 | 32 |
| Social | 35 | 36 | 38 | 40 | 41 | 43 | 45 | 46 | 52 | 53 | 54 | 54 | 55 |
| Politics | 55 | 61 | 82 | 83 | 82 | 65 | 83 | 84 | 84 | 83 | 83 | 84 | 87 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 51 | 51 | 51 | 51 | 51 | 50 | 51 | 51 | 49 | 51 | 54 | 55 | 52 | 52 |
| Economy | 37 | 38 | 39 | 32 | 33 | 31 | 32 | 31 | 29 | 31 | 37 | 39 | 34 | 33 |
| Social | 55 | 56 | 56 | 72 | 72 | 72 | 71 | 71 | 71 | 71 | 71 | 71 | 71 | 71 |
| Politics | 87 | 87 | 85 | 86 | 87 | 86 | 87 | 88 | 89 | 90 | 89 | 88 | 88 | 88 |

Development of real per capita GDP in Japan with and without increasing globalization



Average GDP gain per year and inhabitant

| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

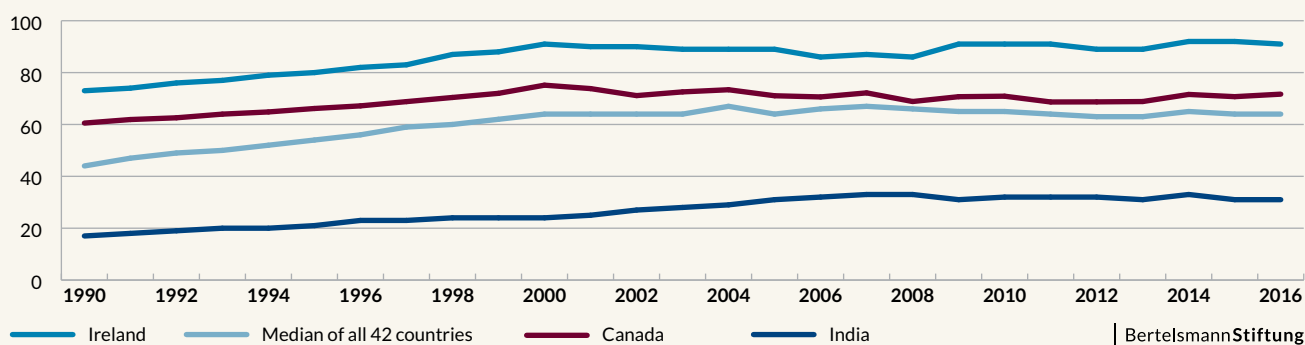
| BertelsmannStiftung

3.19 Canada



Commodity-rich Canada ranks in the middle of both the globalization index and in terms of per capita income gains. Since 1990, the country has become increasingly integrated in global financial markets and thus raised its economic globalization.

Globalization index for Canada in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

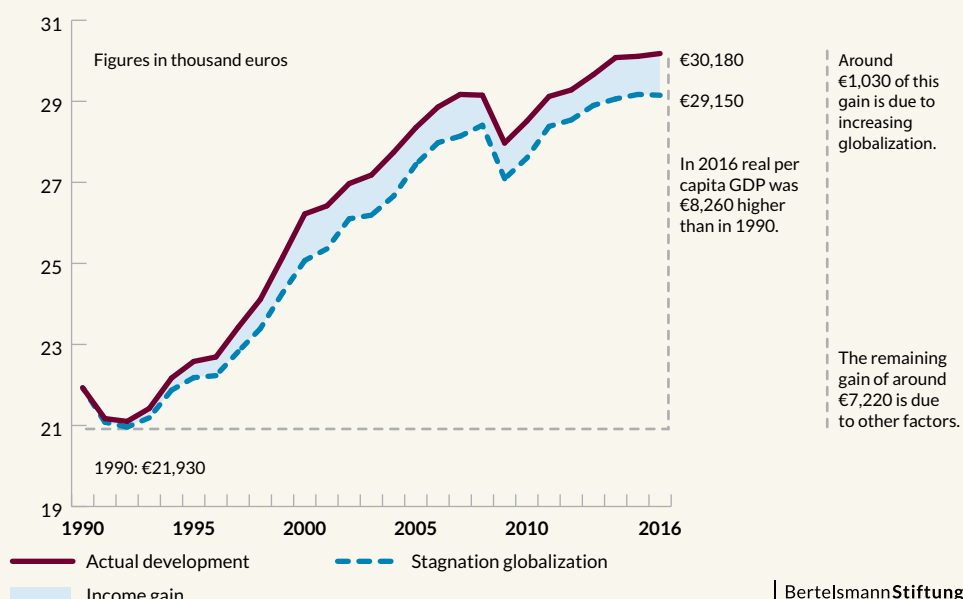


Scores in the globalization index and the three sub-indices for Canada

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 69 | 70 | 72 | 75 | 74 | 71 |
| Economy | 44 | 44 | 44 | 45 | 46 | 48 | 50 | 52 | 55 | 57 | 61 | 59 | 55 |
| Social | 88 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 96 | 96 | 97 | 97 | 97 |
| Politics | 83 | 90 | 92 | 94 | 95 | 95 | 94 | 94 | 93 | 93 | 94 | 94 | 94 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 73 | 73 | 71 | 71 | 72 | 69 | 71 | 71 | 69 | 69 | 69 | 72 | 71 | 72 |
| Economy | 57 | 59 | 55 | 54 | 57 | 51 | 54 | 55 | 51 | 51 | 52 | 57 | 55 | 57 |
| Social | 97 | 97 | 97 | 97 | 97 | 96 | 96 | 96 | 96 | 96 | 95 | 95 | 95 | 95 |
| Politics | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 94 | 93 | 93 | 93 |

Development of real per capita GDP in Canada with and without increasing globalization



Average GDP gain per year and inhabitant

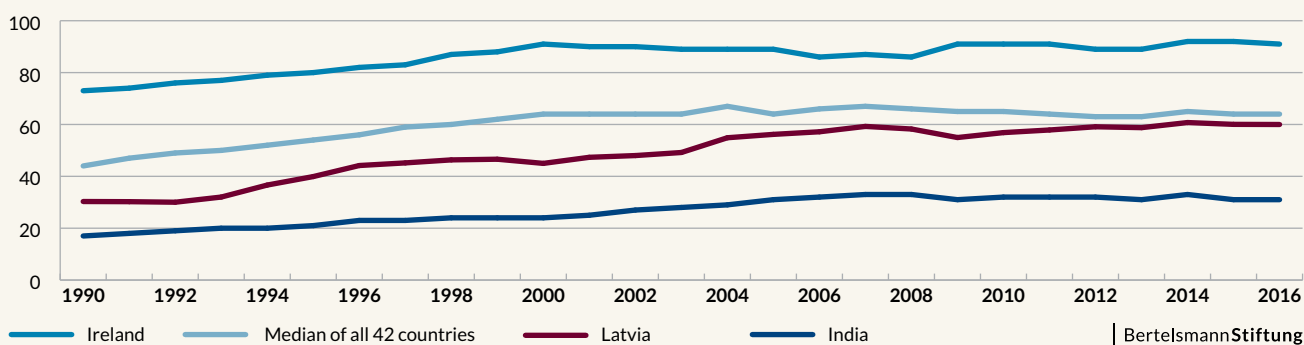
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 17. | Canada | 752 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.20 Latvia



Latvia occupies a place in the bottom third in terms of the level of globalization and per capita income gains. While the country is nearing the top 10 in the Economy sub-index after significant gains, its low political globalization reduces its overall index score.

Globalization index for Latvia in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

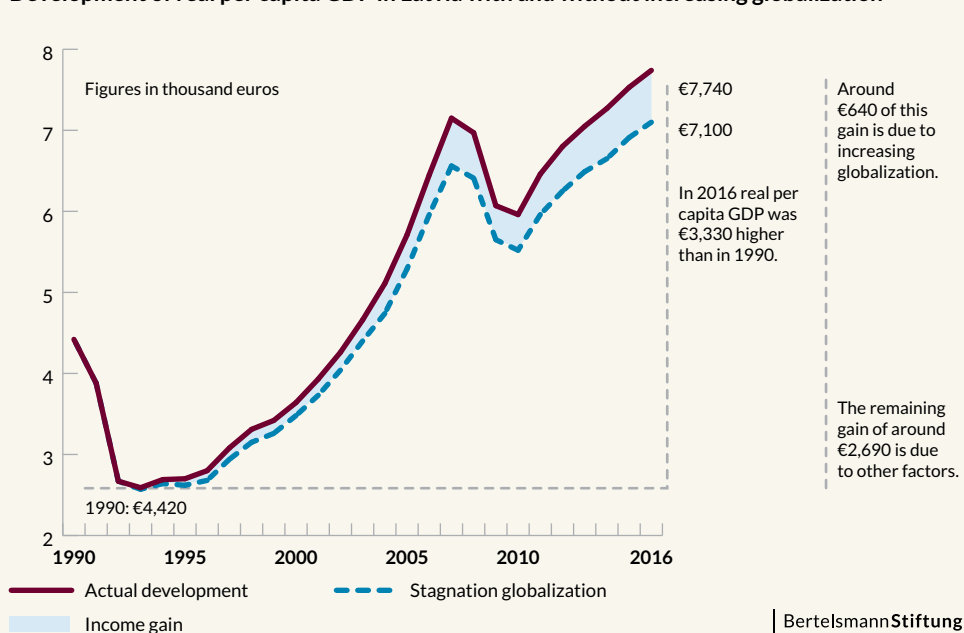


Scores in the globalization index and the three sub-indices for Latvia

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 30 | 30 | 30 | 32 | 37 | 40 | 44 | 45 | 46 | 47 | 45 | 47 | 48 |
| Economy | 33 | 33 | 33 | 36 | 37 | 41 | 48 | 47 | 47 | 46 | 43 | 46 | 46 |
| Social | 46 | 46 | 46 | 43 | 54 | 55 | 56 | 59 | 60 | 60 | 61 | 63 | 64 |
| Politics | 7 | 7 | 5 | 10 | 17 | 21 | 22 | 28 | 29 | 34 | 35 | 36 | 37 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 49 | 55 | 56 | 57 | 59 | 58 | 55 | 57 | 58 | 59 | 59 | 61 | 60 | 60 |
| Economy | 48 | 54 | 55 | 55 | 58 | 56 | 50 | 53 | 55 | 57 | 56 | 59 | 58 | 58 |
| Social | 65 | 70 | 72 | 73 | 72 | 72 | 73 | 73 | 74 | 72 | 72 | 73 | 73 | 73 |
| Politics | 37 | 42 | 44 | 49 | 50 | 51 | 52 | 52 | 51 | 53 | 53 | 54 | 54 | 54 |

Development of real per capita GDP in Latvia with and without increasing globalization



Average GDP gain per year and inhabitant

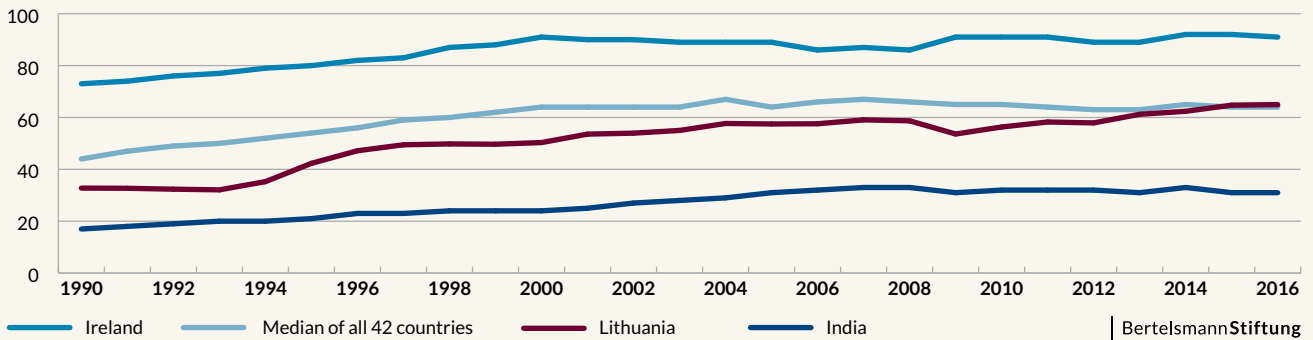
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 29. | Latvia | 320 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.21 Lithuania



Lithuania has increasingly opened up economically, socially and politically since 1990 and also after the financial crisis year of 2009. Nevertheless, per capita GDP gains were relatively small due to the low baseline level, as was the case with the other countries in the region.

Globalization index for Lithuania in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

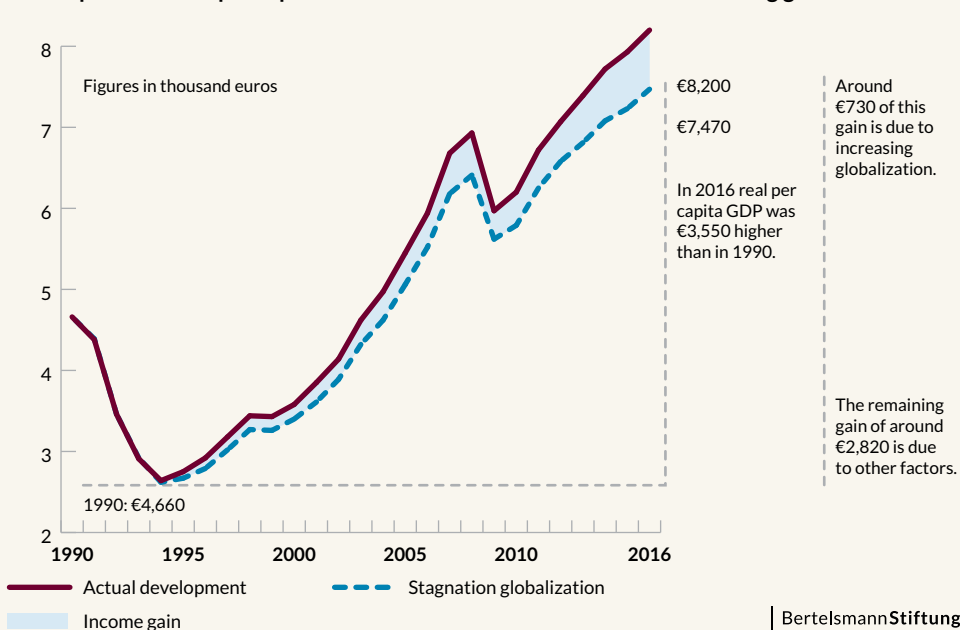


Scores in the globalization index and the three sub-indices for Lithuania

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 33 | 33 | 32 | 32 | 35 | 42 | 47 | 49 | 50 | 50 | 50 | 54 | 54 |
| Economy | 39 | 39 | 38 | 36 | 34 | 42 | 45 | 47 | 46 | 45 | 45 | 50 | 49 |
| Social | 43 | 42 | 42 | 42 | 41 | 42 | 56 | 59 | 61 | 60 | 61 | 62 | 65 |
| Politics | 3 | 3 | 6 | 11 | 34 | 44 | 44 | 48 | 50 | 52 | 55 | 57 | 58 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 55 | 58 | 57 | 58 | 59 | 59 | 54 | 56 | 58 | 58 | 61 | 62 | 65 | 65 |
| Economy | 50 | 52 | 51 | 51 | 52 | 51 | 43 | 47 | 50 | 50 | 49 | 51 | 55 | 55 |
| Social | 65 | 65 | 66 | 67 | 67 | 67 | 67 | 68 | 69 | 69 | 86 | 85 | 85 | 85 |
| Politics | 61 | 66 | 67 | 69 | 72 | 73 | 72 | 71 | 72 | 72 | 73 | 74 | 74 | 74 |

Development of real per capita GDP in Lithuania with and without increasing globalization



Average GDP gain per year and inhabitant

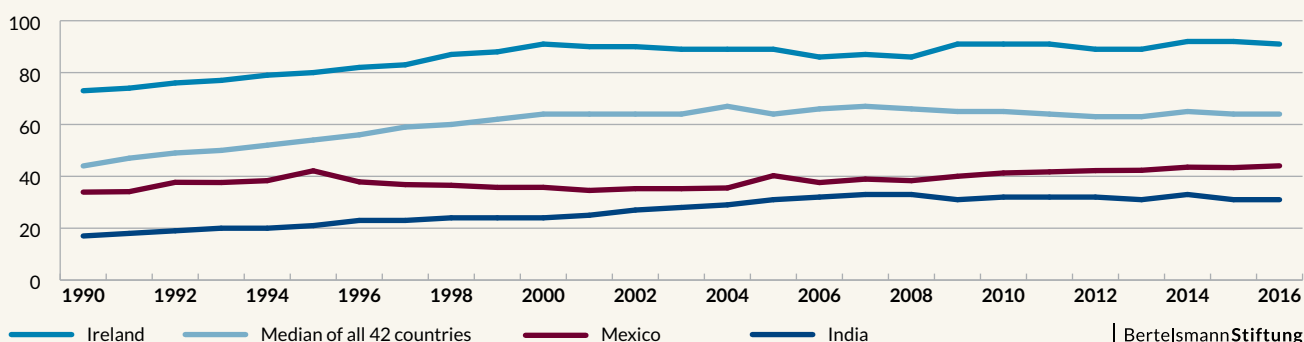
| Ran-king | Country | In € |
|----------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 30. | Lithuania | 318 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.22 Mexico



Mexico's level of integration with foreign countries is low relative to other countries. This emerging country's level of globalization has hardly risen since 1990, so Mexico's per capita income gains are among the lowest in the report.

Globalization index for Mexico in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

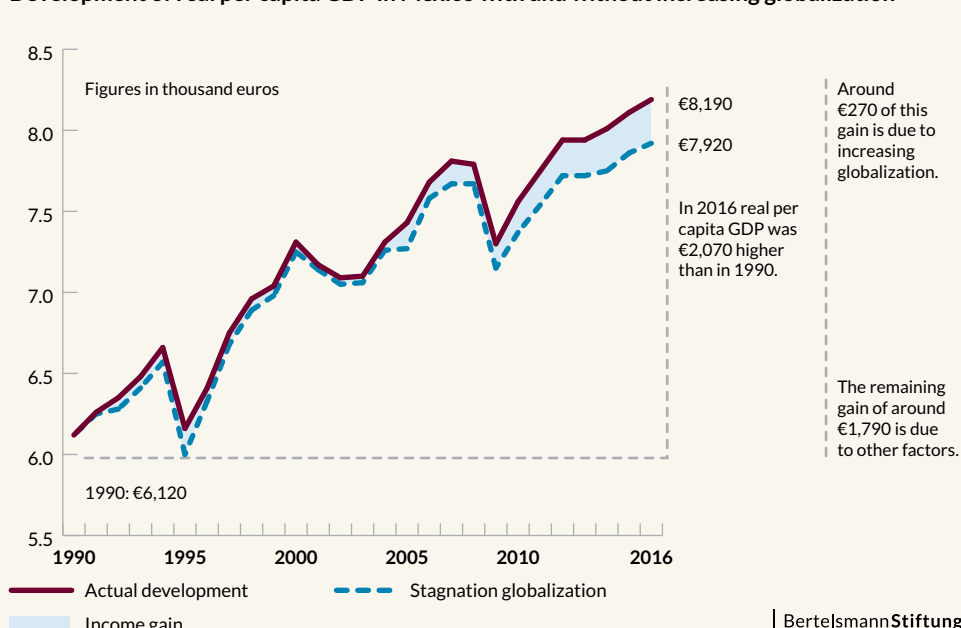


Scores in the globalization index and the three sub-indices for Mexico

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 34 | 34 | 38 | 38 | 38 | 42 | 38 | 37 | 37 | 36 | 36 | 35 | 35 |
| Economy | 27 | 24 | 22 | 22 | 23 | 28 | 26 | 24 | 23 | 22 | 21 | 18 | 19 |
| Social | 37 | 38 | 41 | 41 | 42 | 44 | 45 | 47 | 47 | 48 | 50 | 50 | 52 |
| Politics | 52 | 61 | 81 | 81 | 82 | 83 | 65 | 65 | 65 | 66 | 66 | 67 | 67 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 35 | 36 | 40 | 38 | 39 | 38 | 40 | 41 | 42 | 42 | 42 | 44 | 43 | 44 |
| Economy | 19 | 20 | 27 | 23 | 25 | 24 | 26 | 28 | 29 | 30 | 30 | 33 | 32 | 33 |
| Social | 51 | 51 | 52 | 53 | 51 | 51 | 53 | 52 | 52 | 51 | 51 | 51 | 51 | 51 |
| Politics | 68 | 67 | 67 | 67 | 69 | 68 | 70 | 70 | 70 | 70 | 70 | 69 | 69 | 69 |

Development of real per capita GDP in Mexico with and without increasing globalization



Average GDP gain per year and inhabitant

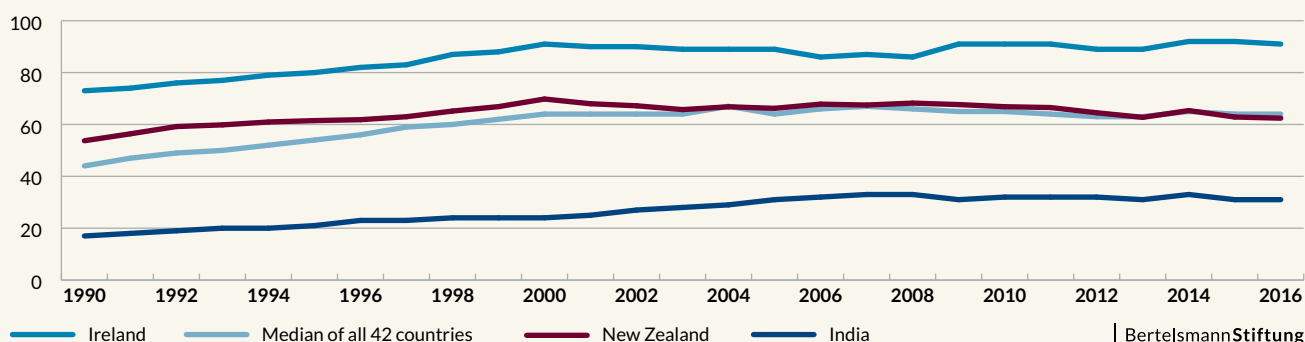
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.23 New Zealand



The level of globalization for New Zealand is average; it is also ranked in the midfield for per capita income globalization gains. Around the year 2000, this country achieved the highest level of global integration in the Southwest Pacific.

Globalization index for New Zealand in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

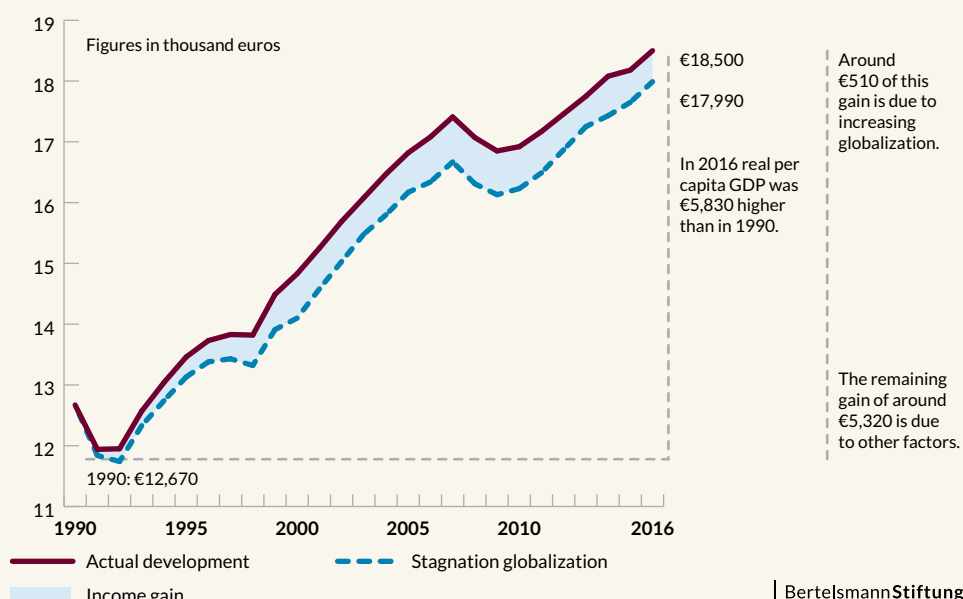


Scores in the globalization index and the three sub-indices for New Zealand

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 54 | 56 | 59 | 60 | 61 | 61 | 62 | 63 | 65 | 67 | 70 | 68 | 67 |
| Economy | 48 | 52 | 54 | 53 | 54 | 54 | 55 | 56 | 60 | 61 | 64 | 60 | 59 |
| Social | 62 | 62 | 63 | 65 | 69 | 70 | 71 | 72 | 74 | 77 | 78 | 78 | 78 |
| Politics | 62 | 65 | 71 | 74 | 74 | 76 | 74 | 74 | 72 | 75 | 80 | 80 | 79 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 66 | 67 | 66 | 68 | 67 | 68 | 68 | 67 | 67 | 65 | 63 | 65 | 63 | 62 |
| Economy | 58 | 60 | 59 | 61 | 60 | 62 | 60 | 59 | 59 | 56 | 53 | 57 | 53 | 52 |
| Social | 78 | 78 | 78 | 78 | 78 | 78 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 |
| Politics | 76 | 76 | 76 | 76 | 79 | 79 | 80 | 80 | 79 | 79 | 79 | 80 | 80 | 80 |

Development of real per capita GDP in New Zealand with and without increasing globalization



Average GDP gain per year and inhabitant

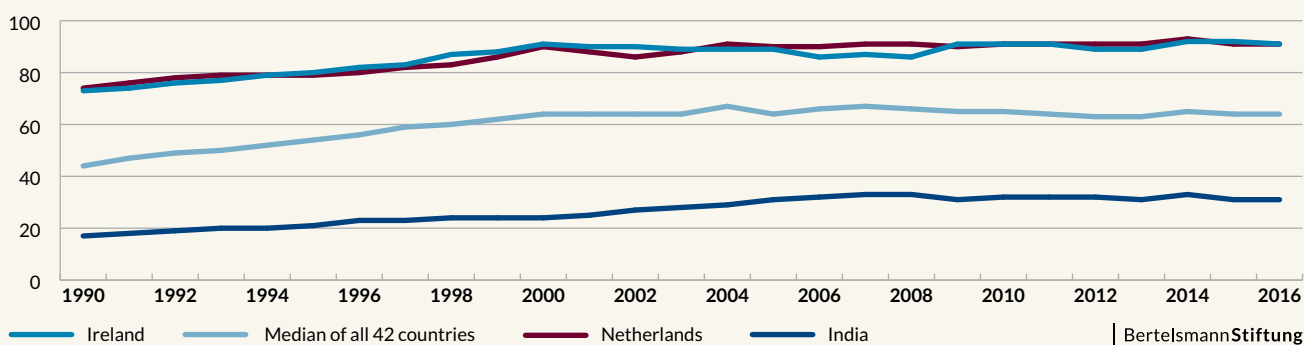
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 21. | New Zealand | 543 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.24 Netherlands



Apart from Ireland, no other country in the report is more closely integrated with the world than the Netherlands. Since the largest globalization push did not take place until the end of the 1990s, per capita GDP gains are somewhat lower than in other industrialized nations.

Globalization index for the Netherlands in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

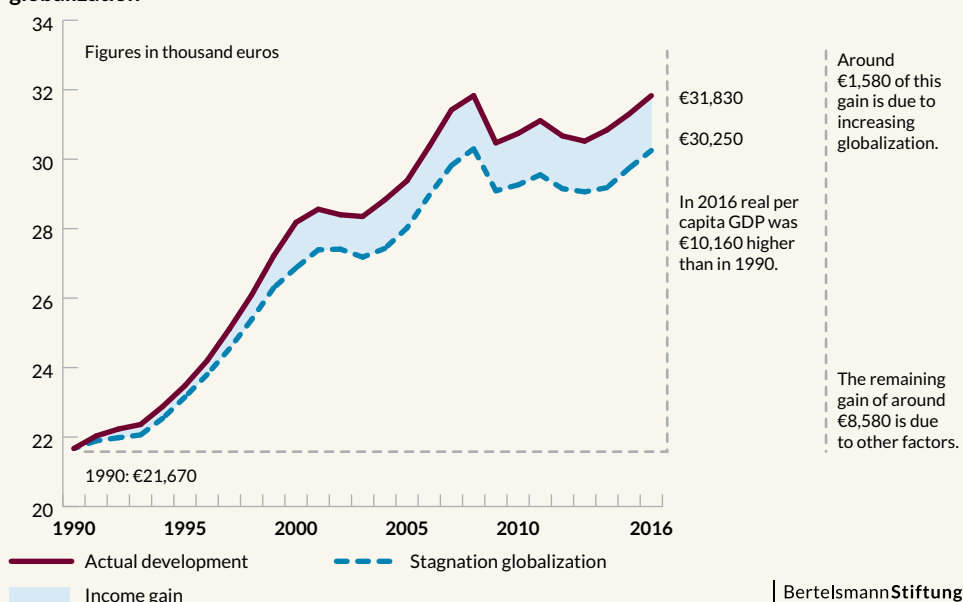


Scores in the globalization index and the three sub-indices for the Netherlands

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 74 | 76 | 78 | 79 | 79 | 79 | 80 | 82 | 83 | 86 | 90 | 88 | 86 |
| Economy | 70 | 71 | 71 | 71 | 72 | 71 | 73 | 77 | 79 | 80 | 87 | 84 | 82 |
| Social | 80 | 82 | 85 | 85 | 86 | 87 | 87 | 87 | 89 | 93 | 93 | 93 | 93 |
| Politics | 82 | 88 | 94 | 95 | 95 | 96 | 92 | 92 | 92 | 94 | 95 | 96 | 93 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 88 | 91 | 90 | 90 | 91 | 91 | 90 | 91 | 91 | 91 | 91 | 93 | 91 | 91 |
| Economy | 85 | 89 | 88 | 87 | 89 | 87 | 86 | 88 | 89 | 88 | 87 | 90 | 88 | 87 |
| Social | 94 | 94 | 95 | 95 | 95 | 96 | 95 | 96 | 97 | 97 | 97 | 97 | 97 | 97 |
| Politics | 93 | 92 | 91 | 93 | 96 | 95 | 94 | 94 | 93 | 94 | 94 | 97 | 97 | 97 |

Development of real per capita GDP in the Netherlands with and without increasing globalization



Average GDP gain per year and inhabitant

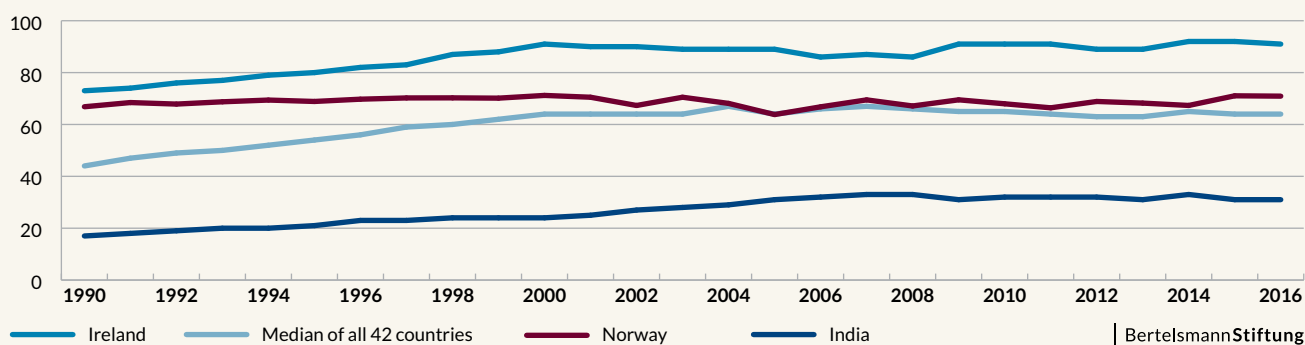
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 8. | Netherlands | 1.080 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.25 Norway



Norway has an average degree of globalization today. Per capita GDP gains are low, because this commodity-rich country was already globally integrated in 1990 and its level of globalization has hardly increased since then.

Globalization index for Norway in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

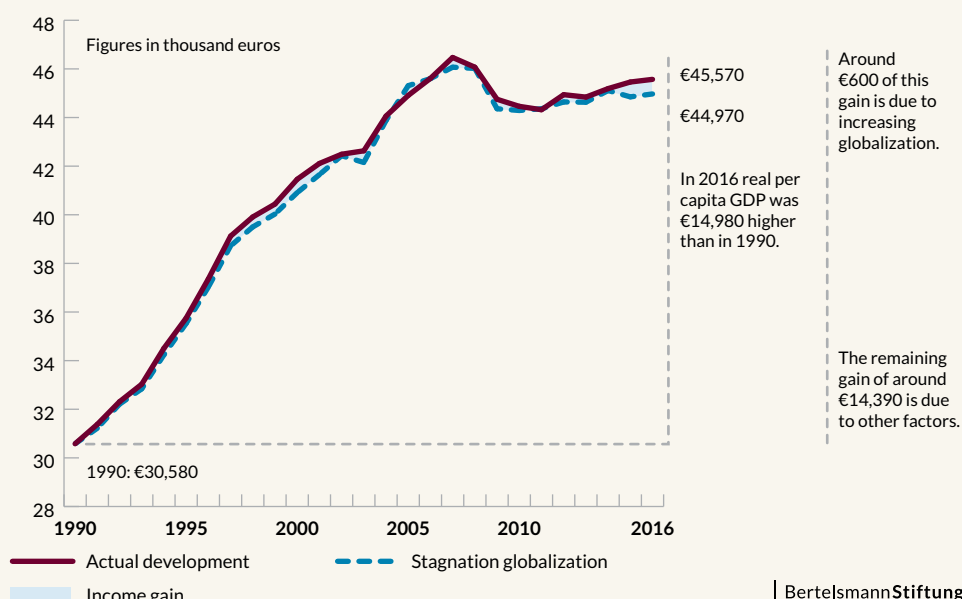


Scores in the globalization index and the three sub-indices for Norway

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 67 | 68 | 68 | 69 | 69 | 69 | 70 | 70 | 70 | 70 | 71 | 71 | 67 |
| Economy | 61 | 60 | 58 | 59 | 59 | 58 | 58 | 59 | 60 | 59 | 60 | 58 | 52 |
| Social | 75 | 76 | 77 | 78 | 79 | 80 | 83 | 84 | 84 | 87 | 89 | 90 | 91 |
| Politics | 77 | 86 | 87 | 89 | 91 | 90 | 91 | 91 | 89 | 88 | 89 | 89 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 71 | 68 | 64 | 67 | 69 | 67 | 69 | 68 | 66 | 69 | 68 | 67 | 71 | 71 |
| Economy | 58 | 54 | 47 | 52 | 55 | 51 | 54 | 52 | 50 | 54 | 52 | 51 | 57 | 57 |
| Social | 90 | 92 | 89 | 90 | 91 | 91 | 91 | 91 | 91 | 91 | 91 | 92 | 92 | 92 |
| Politics | 88 | 88 | 88 | 89 | 91 | 92 | 93 | 92 | 92 | 93 | 93 | 93 | 93 | 93 |

Development of real per capita GDP in Norway with and without increasing globalization



Average GDP gain per year and inhabitant

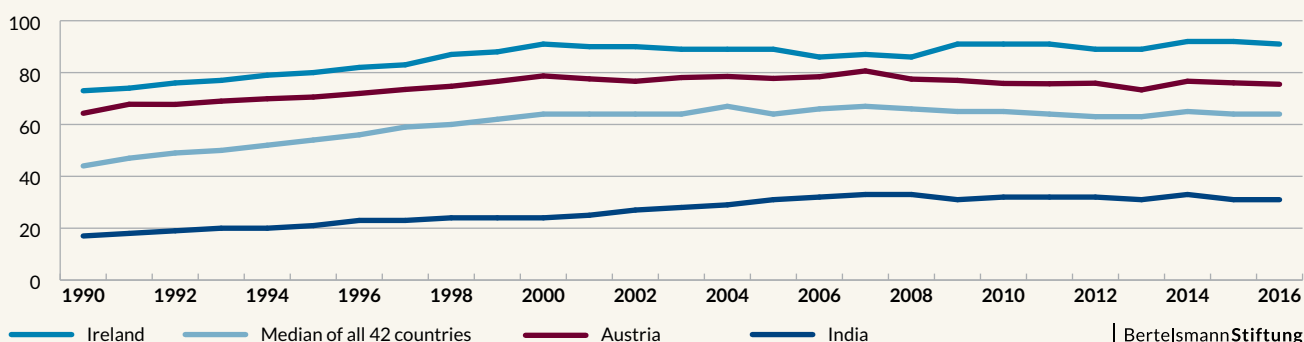
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 33. | Norway | 254 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.26 Austria



As a small, open economy, Austria has a high level of globalization. Austria is highly integrated socially with the rest of the world. Also, the country is in the top third in terms of per capita income gains.

Globalization index for Austria in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

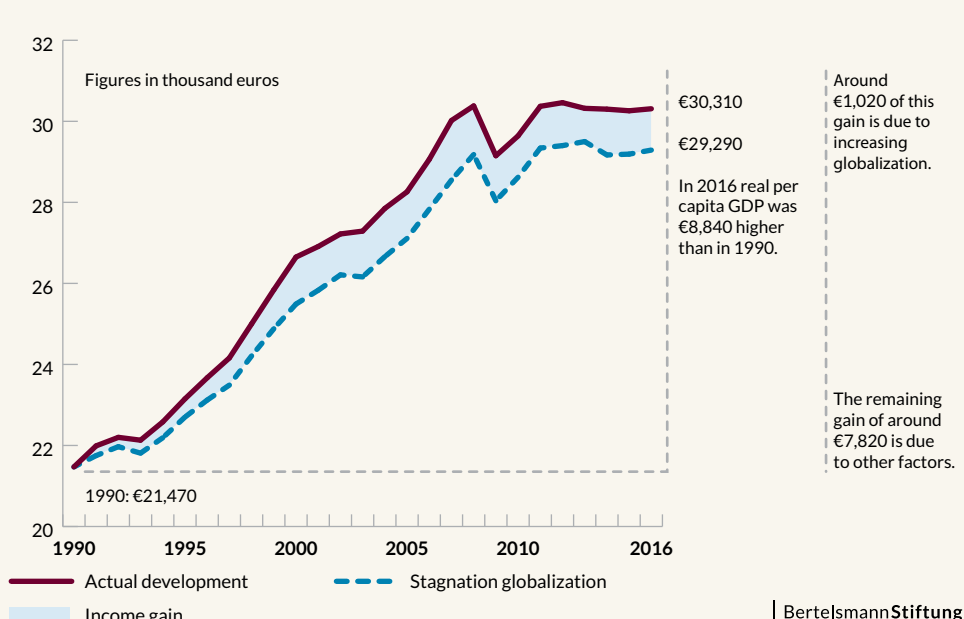


Scores in the globalization index and the three sub-indices for Austria

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 64 | 68 | 68 | 69 | 70 | 71 | 72 | 74 | 75 | 77 | 79 | 78 | 77 |
| Economy | 52 | 53 | 52 | 53 | 54 | 55 | 56 | 59 | 60 | 63 | 66 | 64 | 63 |
| Social | 86 | 88 | 89 | 90 | 91 | 92 | 94 | 94 | 94 | 96 | 97 | 97 | 95 |
| Politics | 80 | 91 | 93 | 95 | 96 | 97 | 97 | 97 | 98 | 98 | 98 | 98 | 98 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 78 | 79 | 78 | 78 | 81 | 77 | 77 | 76 | 76 | 76 | 73 | 77 | 76 | 75 |
| Economy | 65 | 67 | 65 | 66 | 69 | 64 | 63 | 61 | 61 | 61 | 57 | 63 | 62 | 62 |
| Social | 96 | 96 | 97 | 97 | 98 | 98 | 98 | 98 | 98 | 98 | 98 | 97 | 97 | 97 |
| Politics | 98 | 97 | 97 | 98 | 98 | 98 | 98 | 97 | 98 | 98 | 98 | 96 | 96 | 96 |

Development of real per capita GDP in Austria with and without increasing globalization



Average GDP gain per year and inhabitant

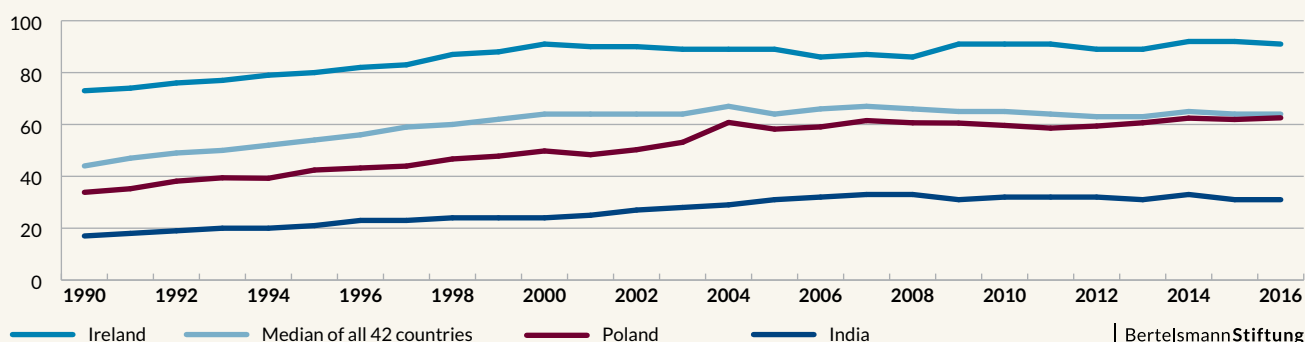
| Ranking | Country | In € |
|---------|----------------|------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 11. | Austria | 904 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.27 Poland



Poland is somewhat less globalized than the majority of the countries in this report. The economy has been a part of the EU since 2004 and steadily increased its level of globalization until the global financial crisis in 2008. Per capita GDP has risen moderately due to globalization.

Globalization index for Poland in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

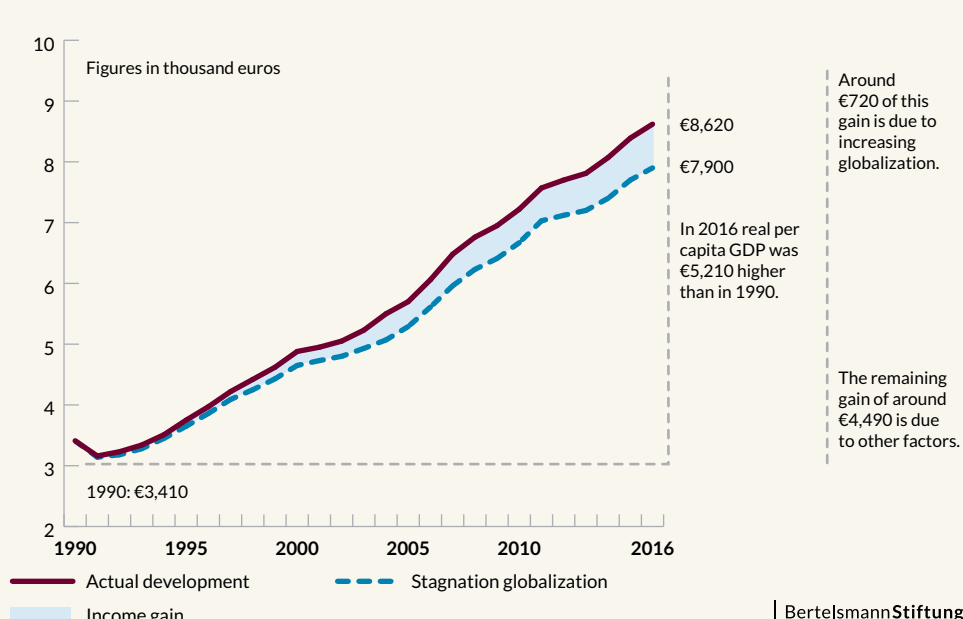


Scores in the globalization index and the three sub-indices for Poland

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 34 | 35 | 38 | 39 | 39 | 42 | 43 | 44 | 47 | 48 | 50 | 48 | 50 |
| Economy | 22 | 18 | 18 | 15 | 14 | 17 | 18 | 18 | 22 | 23 | 27 | 25 | 28 |
| Social | 36 | 51 | 65 | 67 | 67 | 71 | 73 | 75 | 78 | 78 | 76 | 76 | 76 |
| Politics | 67 | 71 | 73 | 84 | 88 | 89 | 90 | 91 | 90 | 91 | 92 | 92 | 92 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 53 | 61 | 58 | 59 | 62 | 61 | 61 | 60 | 59 | 59 | 61 | 62 | 62 | 63 |
| Economy | 32 | 44 | 39 | 40 | 44 | 42 | 42 | 42 | 40 | 42 | 43 | 46 | 46 | 47 |
| Social | 77 | 81 | 81 | 83 | 82 | 83 | 82 | 83 | 83 | 83 | 83 | 84 | 84 | 84 |
| Politics | 93 | 93 | 93 | 94 | 95 | 95 | 95 | 90 | 90 | 89 | 90 | 89 | 89 | 89 |

Development of real per capita GDP in Poland with and without increasing globalization



Average GDP gain per year and inhabitant

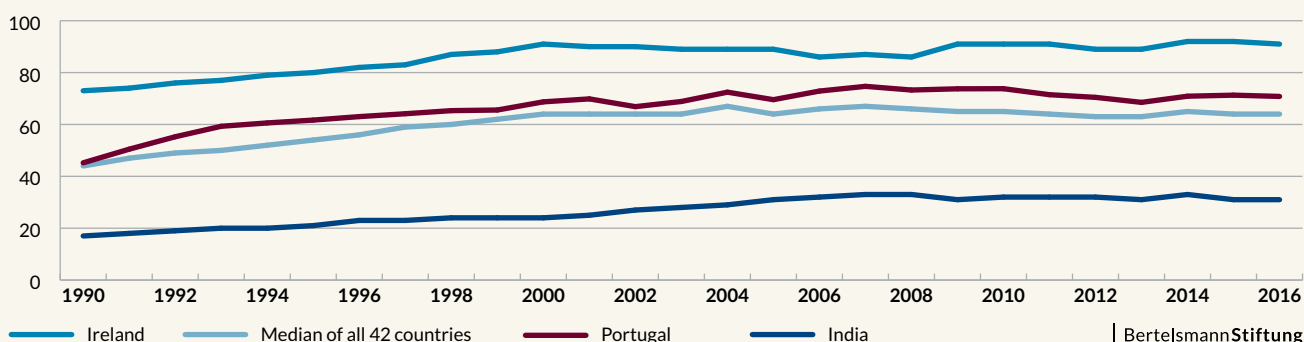
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 28. | Poland | 350 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.28 Portugal



Portugal has increasingly opened up economically, socially and politically since 1990. Since the level of social and political globalization rose in the early 1990s, significant increases in per capita GDP have been achieved over time.

Globalization index for Portugal in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

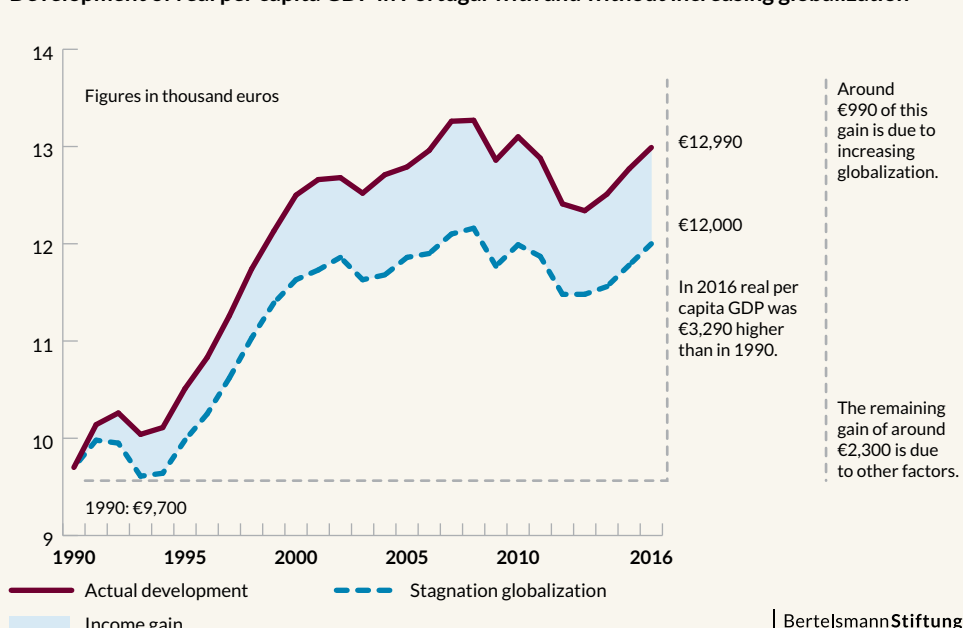


Scores in the globalization index and the three sub-indices for Portugal

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 45 | 50 | 55 | 59 | 61 | 62 | 63 | 64 | 65 | 66 | 69 | 70 | 67 |
| Economy | 45 | 45 | 45 | 49 | 50 | 52 | 53 | 54 | 56 | 56 | 59 | 61 | 56 |
| Social | 38 | 56 | 60 | 62 | 63 | 66 | 67 | 69 | 70 | 72 | 73 | 73 | 73 |
| Politics | 53 | 62 | 83 | 88 | 89 | 88 | 90 | 90 | 90 | 89 | 93 | 94 | 93 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 69 | 72 | 70 | 73 | 75 | 73 | 74 | 74 | 71 | 70 | 69 | 71 | 71 | 71 |
| Economy | 59 | 60 | 56 | 61 | 63 | 61 | 62 | 61 | 58 | 57 | 55 | 59 | 59 | 58 |
| Social | 73 | 90 | 90 | 90 | 91 | 90 | 90 | 90 | 88 | 88 | 88 | 88 | 88 | 88 |
| Politics | 94 | 92 | 90 | 91 | 95 | 95 | 95 | 95 | 95 | 94 | 89 | 91 | 91 | 91 |

Development of real per capita GDP in Portugal with and without increasing globalization



Average GDP gain per year and inhabitant

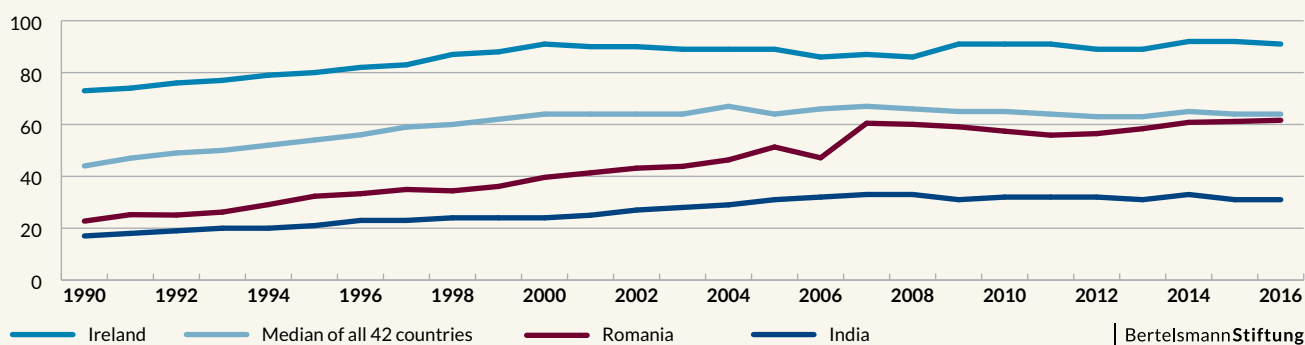
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 13. | Portugal | 819 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.29 Romania



Romania's globalization index was hardly any higher than India's in 1990. A good 25 years later, the country is regarded as globalized to an average degree. Since this Balkan country's level of income was low at that time and remains so today, absolute per capita GDP gains are limited.

Globalization index for Romania in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

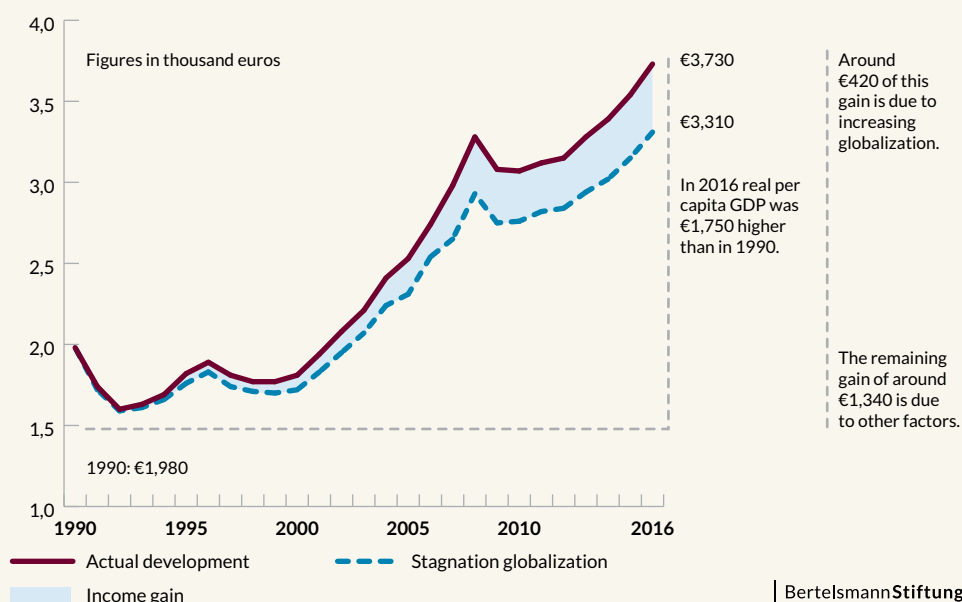


Scores in the globalization index and the three sub-indices for Romania

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 23 | 25 | 25 | 26 | 29 | 32 | 33 | 35 | 34 | 36 | 40 | 41 | 43 |
| Economy | 18 | 15 | 15 | 14 | 15 | 15 | 14 | 16 | 15 | 17 | 20 | 24 | 25 |
| Social | 17 | 17 | 16 | 16 | 19 | 34 | 38 | 42 | 43 | 45 | 51 | 48 | 52 |
| Politics | 43 | 65 | 64 | 73 | 81 | 84 | 85 | 86 | 85 | 85 | 86 | 87 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 44 | 46 | 51 | 47 | 60 | 60 | 59 | 57 | 56 | 56 | 58 | 61 | 61 | 62 |
| Economy | 26 | 30 | 38 | 30 | 47 | 46 | 45 | 42 | 40 | 41 | 44 | 48 | 48 | 49 |
| Social | 52 | 52 | 52 | 54 | 70 | 71 | 71 | 69 | 69 | 70 | 70 | 70 | 70 | 70 |
| Politics | 89 | 90 | 90 | 91 | 93 | 92 | 91 | 91 | 91 | 90 | 90 | 90 | 90 | 90 |

Development of real per capita GDP in Romania with and without increasing globalization



Average GDP gain per year and inhabitant

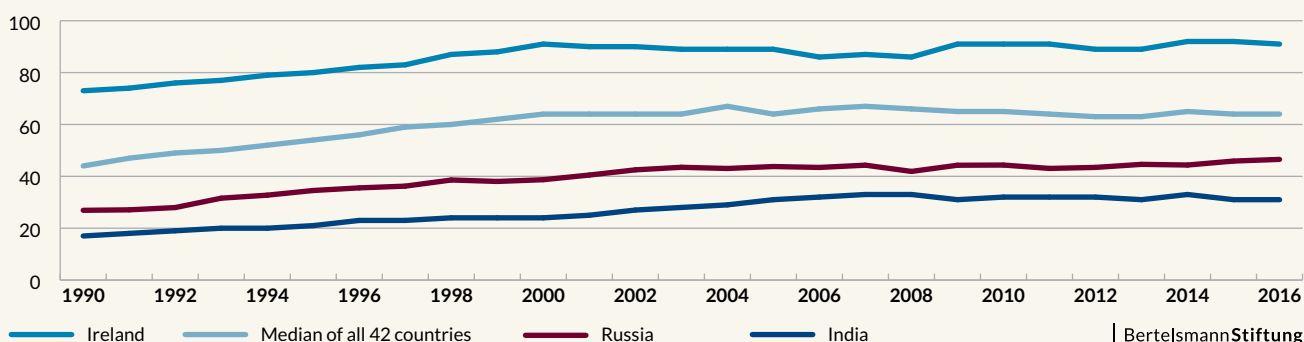
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 34. | Romania | 188 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.30 Russia



Russia is less integrated with the international community than most other countries in the report. Its level of globalization has remained relatively stable since 2002. Absolute per capita income gains are low for this reason and due to the low baseline level.

Globalization index for Russia in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

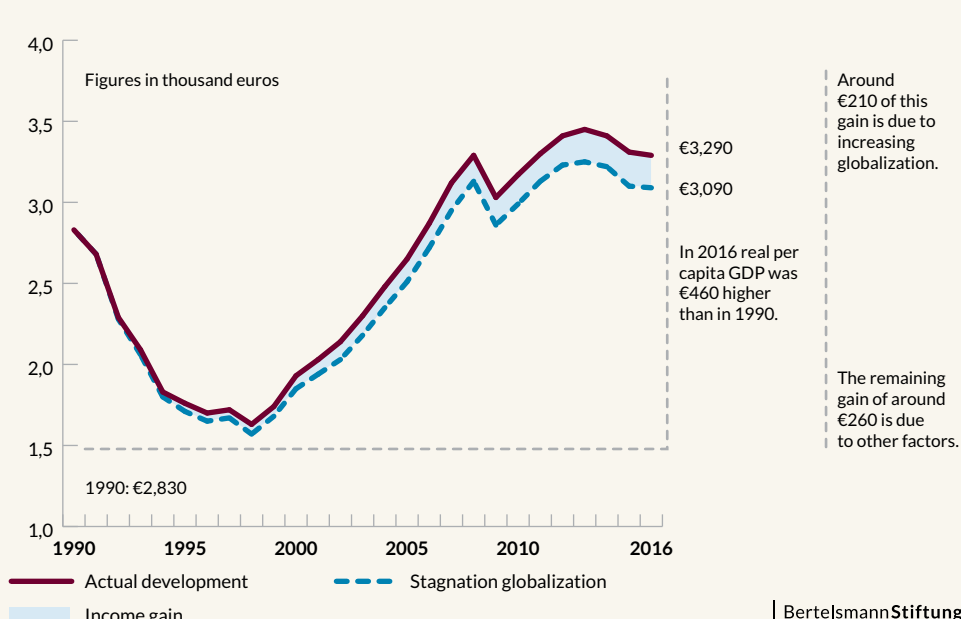


Scores in the globalization index and the three sub-indices for Russia

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 27 | 27 | 28 | 32 | 33 | 35 | 36 | 36 | 39 | 38 | 39 | 41 | 43 |
| Economy | 10 | 10 | 10 | 11 | 11 | 13 | 13 | 14 | 17 | 17 | 12 | 14 | 17 |
| Social | 38 | 38 | 38 | 43 | 45 | 47 | 49 | 50 | 53 | 51 | 66 | 70 | 71 |
| Politics | 67 | 68 | 71 | 83 | 85 | 87 | 89 | 90 | 88 | 89 | 90 | 91 | 92 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 43 | 43 | 44 | 43 | 44 | 42 | 44 | 44 | 43 | 43 | 45 | 44 | 46 | 47 |
| Economy | 18 | 17 | 19 | 18 | 19 | 15 | 19 | 20 | 18 | 19 | 21 | 21 | 23 | 24 |
| Social | 71 | 72 | 71 | 72 | 71 | 71 | 71 | 67 | 67 | 68 | 68 | 68 | 68 | 68 |
| Politics | 92 | 92 | 92 | 92 | 93 | 93 | 93 | 93 | 93 | 92 | 92 | 92 | 92 | 92 |

Development of real per capita GDP in Russia with and without increasing globalization



Average GDP gain per year and inhabitant

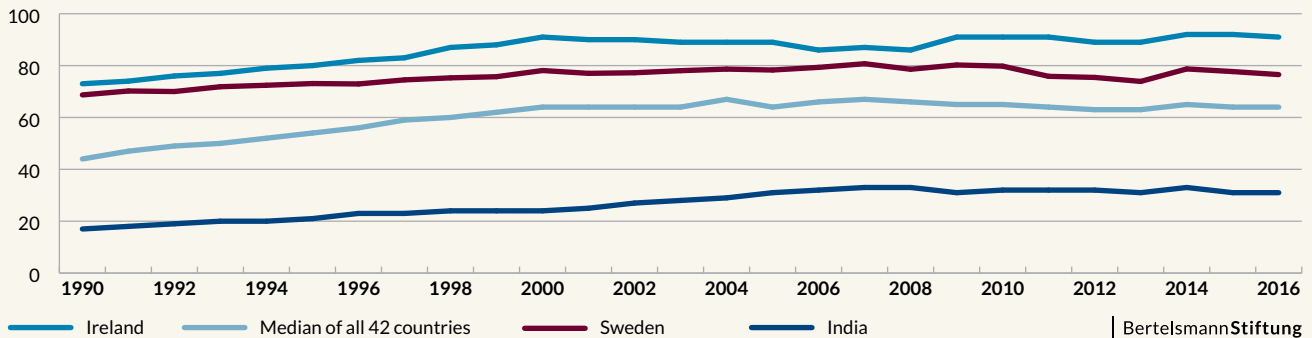
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.31 Sweden



Sweden is globalized economically, socially and politically to an above-average level. The country already occupied top positions for globalization and income in 1990. Additional global integration have increased per capita GDP further since then.

Globalization index for Sweden in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

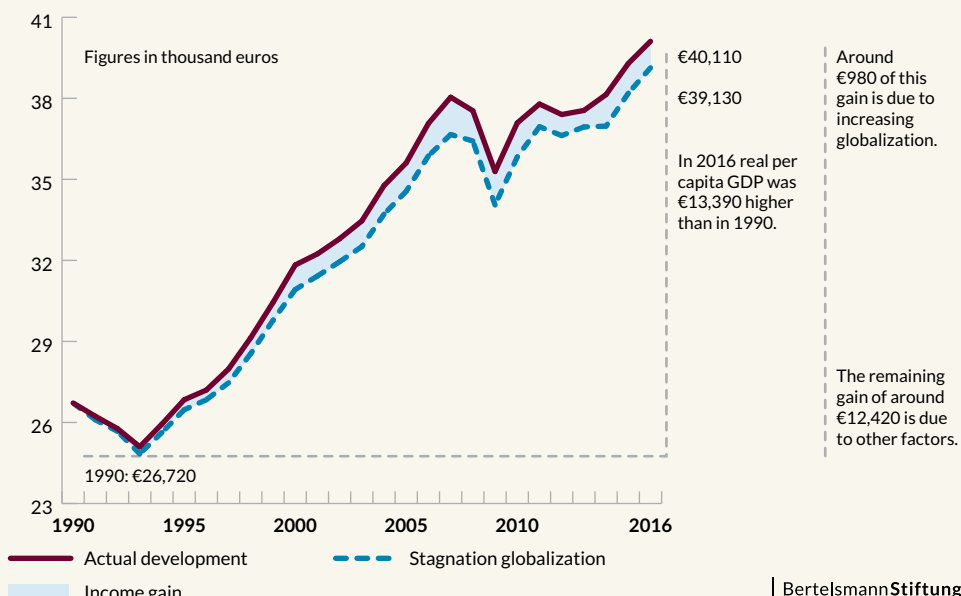


Scores in the globalization index and the three sub-indices for Sweden

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 69 | 70 | 70 | 72 | 72 | 73 | 73 | 74 | 75 | 76 | 78 | 77 | 77 |
| Economy | 59 | 59 | 58 | 61 | 60 | 61 | 61 | 63 | 63 | 64 | 68 | 66 | 66 |
| Social | 80 | 81 | 81 | 82 | 83 | 83 | 86 | 88 | 90 | 90 | 90 | 91 | 92 |
| Politics | 85 | 94 | 94 | 95 | 98 | 98 | 96 | 97 | 97 | 96 | 97 | 97 | 96 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 78 | 79 | 78 | 79 | 81 | 79 | 80 | 80 | 76 | 75 | 74 | 79 | 78 | 77 |
| Economy | 67 | 68 | 67 | 69 | 72 | 68 | 71 | 71 | 64 | 64 | 61 | 69 | 67 | 65 |
| Social | 92 | 92 | 92 | 92 | 92 | 92 | 91 | 91 | 91 | 90 | 90 | 90 | 90 | 90 |
| Politics | 97 | 98 | 98 | 98 | 97 | 97 | 96 | 96 | 96 | 96 | 96 | 97 | 97 | 97 |

Development of real per capita GDP in Sweden with and without increasing globalization



Average GDP gain per year and inhabitant

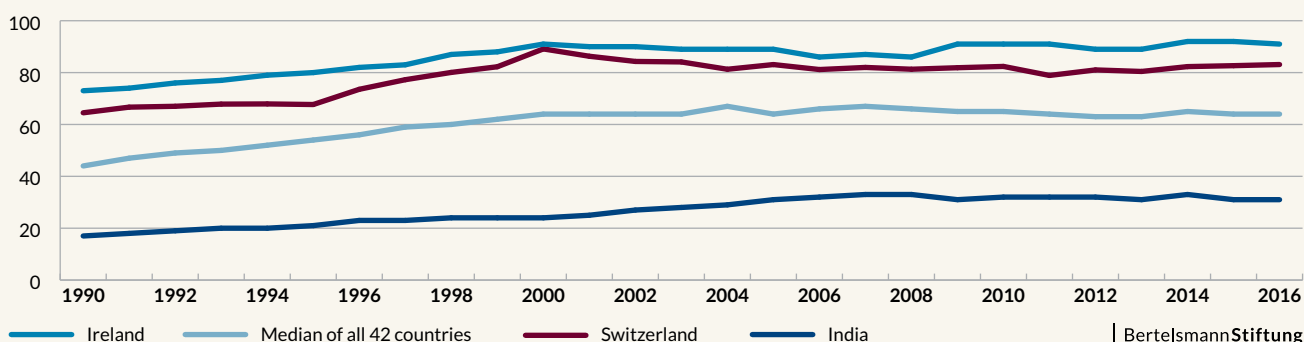
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 14. | Sweden | 793 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.32 Switzerland



Although it is not in the EU, Switzerland is one of the most highly integrated economies in the world. In no other country did per capita income increase as strongly as it did here due to growing integration. Switzerland's high level of GDP also contributes to this.

Globalization index for Switzerland in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

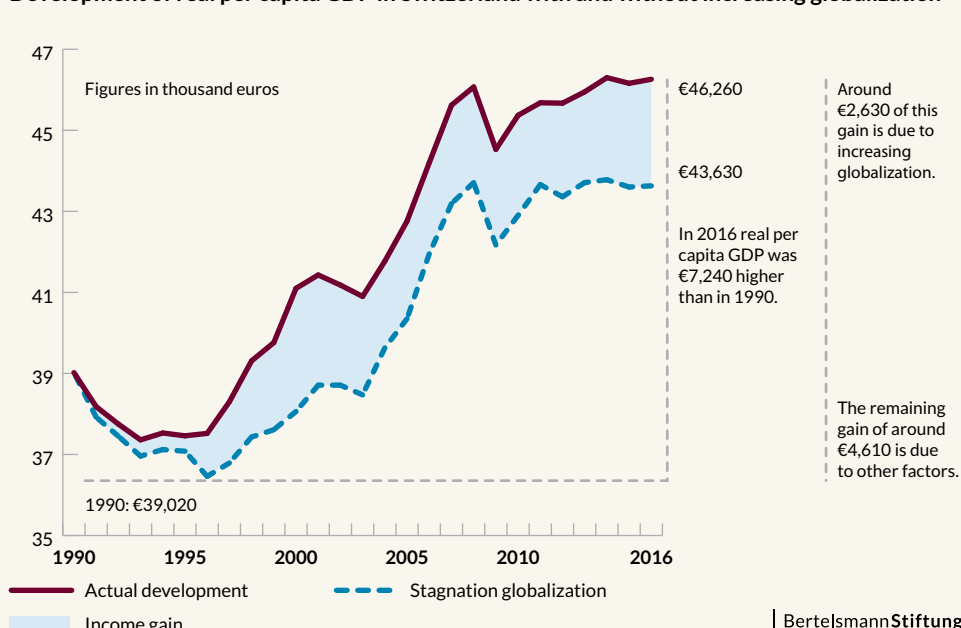


Scores in the globalization index and the three sub-indices for Switzerland

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 64 | 67 | 67 | 68 | 68 | 68 | 74 | 77 | 80 | 82 | 89 | 86 | 84 |
| Economy | 54 | 53 | 53 | 53 | 52 | 52 | 61 | 67 | 71 | 73 | 85 | 80 | 77 |
| Social | 87 | 89 | 89 | 90 | 91 | 92 | 93 | 94 | 96 | 100 | 98 | 98 | 99 |
| Politics | 74 | 85 | 87 | 91 | 91 | 91 | 92 | 92 | 92 | 91 | 92 | 92 | 92 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 84 | 81 | 83 | 81 | 82 | 81 | 82 | 82 | 79 | 81 | 80 | 82 | 83 | 83 |
| Economy | 77 | 72 | 75 | 72 | 73 | 71 | 72 | 73 | 68 | 71 | 70 | 73 | 74 | 75 |
| Social | 99 | 99 | 99 | 98 | 99 | 99 | 98 | 98 | 98 | 98 | 97 | 97 | 97 | 97 |
| Politics | 92 | 92 | 92 | 93 | 93 | 93 | 94 | 93 | 93 | 94 | 94 | 94 | 94 | 94 |

Development of real per capita GDP in Switzerland with and without increasing globalization



Average GDP gain per year and inhabitant

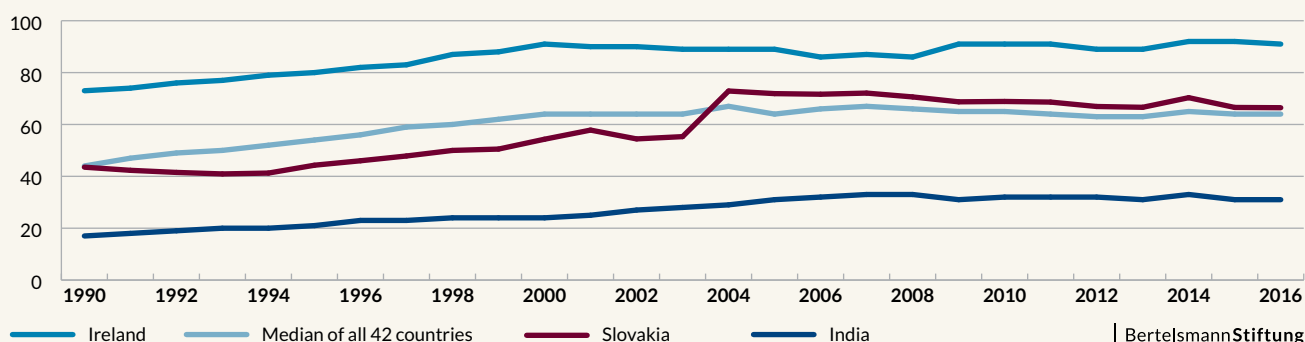
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.33 Slovakia



Slovakia is integrated to an average level. This Eastern European economy experienced a substantial boost in globalization when it joined the EU in 2004. The country ranks toward the bottom of the midfield in per capita income gains due to globalization.

Globalization index for the Slovakia in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

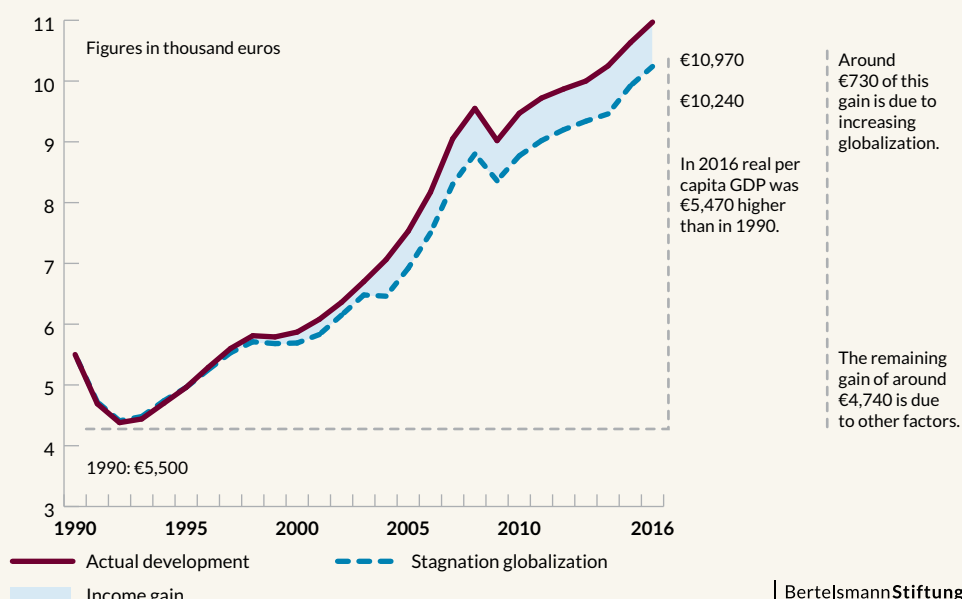


Scores in the globalization index and the three sub-indices for Slovakia

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 44 | 42 | 42 | 41 | 41 | 44 | 46 | 48 | 50 | 51 | 54 | 58 | 54 |
| Economy | 35 | 33 | 32 | 31 | 30 | 28 | 30 | 32 | 35 | 35 | 40 | 45 | 38 |
| Social | 56 | 56 | 56 | 56 | 59 | 73 | 76 | 78 | 81 | 81 | 82 | 81 | 82 |
| Politics | 55 | 55 | 55 | 55 | 58 | 63 | 64 | 66 | 63 | 66 | 70 | 74 | 76 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 55 | 73 | 72 | 72 | 72 | 71 | 69 | 69 | 69 | 67 | 67 | 70 | 67 | 66 |
| Economy | 39 | 67 | 64 | 63 | 63 | 60 | 57 | 57 | 57 | 54 | 54 | 61 | 54 | 54 |
| Social | 82 | 83 | 87 | 87 | 88 | 89 | 89 | 88 | 88 | 88 | 88 | 87 | 87 | 87 |
| Politics | 77 | 79 | 80 | 82 | 82 | 84 | 83 | 84 | 84 | 84 | 85 | 82 | 82 | 82 |

Development of real per capita GDP in Slovakia with and without increasing globalization



Average GDP gain per year and inhabitant

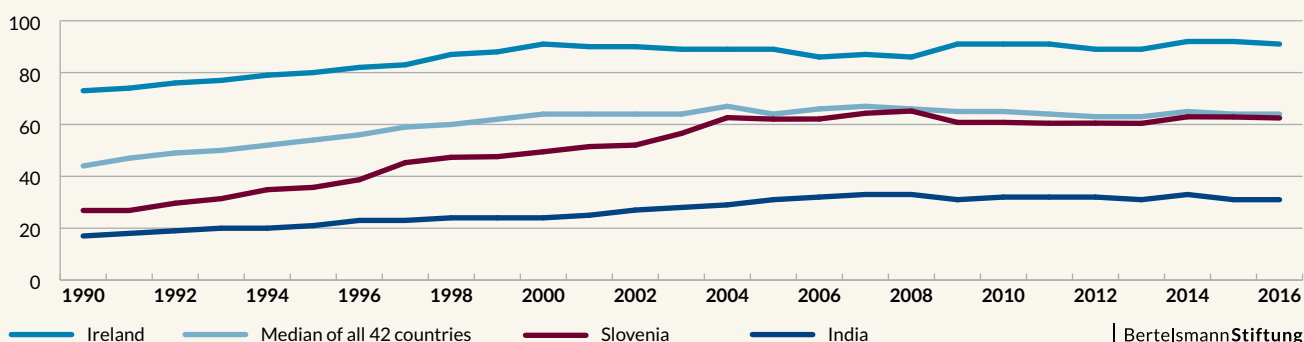
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 27. | Slovakia | 387 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.34 Slovenia



Slovenia opened up considerably leading up to 2004. Per capita GDP in this former Yugoslav republic was already level with Portugal in 1990. On this basis, Slovenia's increasing globalization led to substantial gains in income.

Globalization index for Slovenia in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

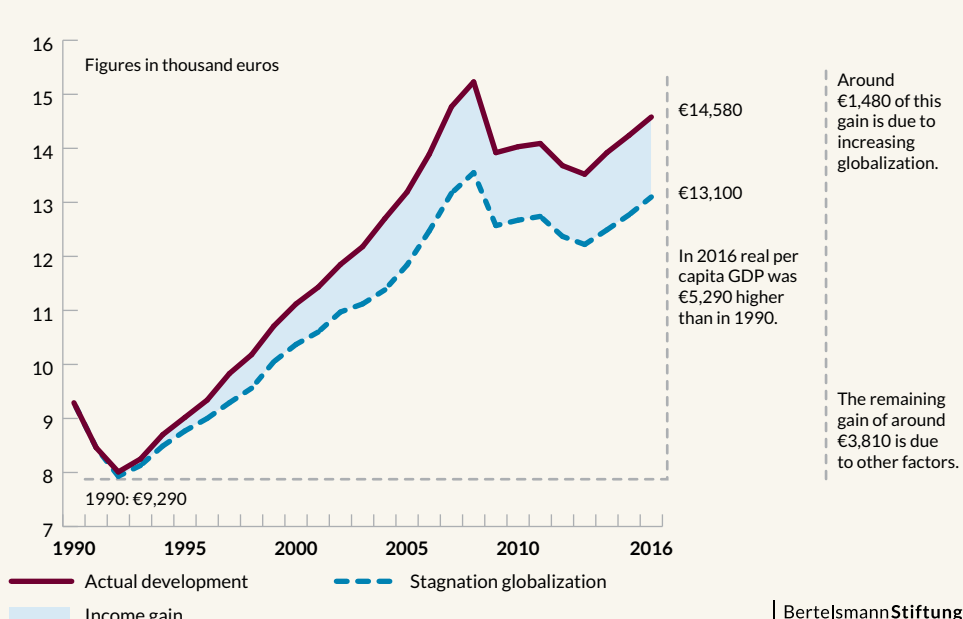


Scores in the globalization index and the three sub-indices for Slovenia

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 27 | 27 | 30 | 31 | 35 | 36 | 39 | 45 | 47 | 48 | 49 | 51 | 52 |
| Economy | 28 | 28 | 28 | 28 | 29 | 28 | 29 | 33 | 35 | 35 | 38 | 39 | 39 |
| Social | 45 | 45 | 45 | 57 | 61 | 62 | 71 | 72 | 71 | 71 | 69 | 72 | 72 |
| Politics | 4 | 4 | 18 | 16 | 27 | 31 | 34 | 55 | 60 | 62 | 65 | 67 | 70 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 57 | 63 | 62 | 62 | 64 | 65 | 61 | 61 | 60 | 61 | 60 | 63 | 63 | 63 |
| Economy | 46 | 54 | 53 | 53 | 55 | 56 | 49 | 49 | 48 | 48 | 48 | 53 | 53 | 52 |
| Social | 72 | 76 | 75 | 76 | 76 | 77 | 76 | 76 | 76 | 76 | 76 | 75 | 75 | 75 |
| Politics | 72 | 75 | 75 | 76 | 79 | 80 | 81 | 81 | 82 | 83 | 83 | 82 | 82 | 82 |

Development of real per capita GDP in Slovenia with and without increasing globalization



Average GDP gain per year and inhabitant

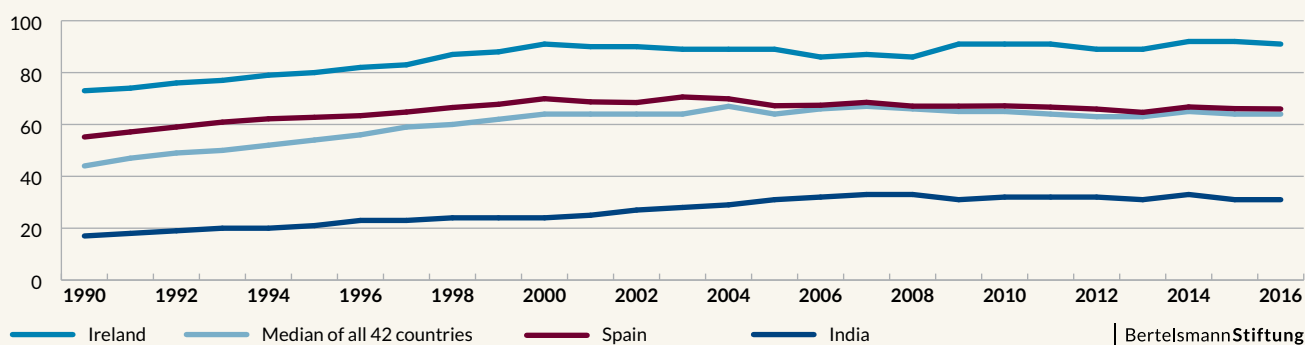
| Ranking | Country | In € |
|---------|-----------------|------------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 9. | Slovenia | 953 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.35 Spain



Spain has integrated globally to a lesser extent than other countries since 1990. The EU country is in the midfield today with regard to level globalization and per capita income globalization gains.

Globalization index for Spain in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

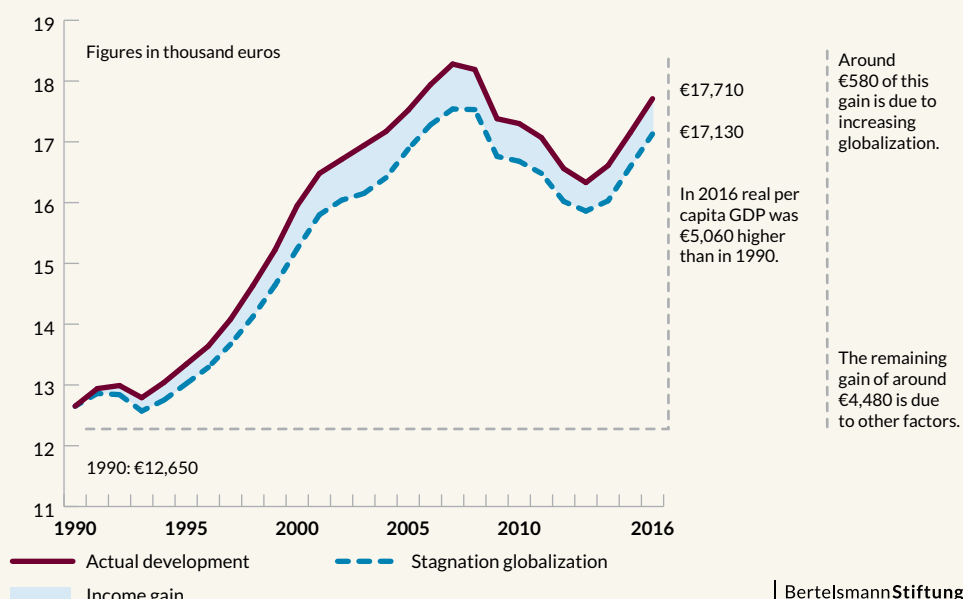


Scores in the globalization index and the three sub-indices for Spain

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 55 | 57 | 59 | 61 | 62 | 63 | 63 | 65 | 67 | 68 | 70 | 69 | 68 |
| Economy | 43 | 44 | 45 | 47 | 48 | 48 | 49 | 51 | 53 | 54 | 57 | 55 | 54 |
| Social | 66 | 68 | 70 | 71 | 73 | 75 | 78 | 79 | 83 | 84 | 85 | 86 | 87 |
| Politics | 81 | 86 | 90 | 93 | 95 | 95 | 91 | 91 | 92 | 92 | 92 | 93 | 92 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 71 | 70 | 67 | 67 | 69 | 67 | 67 | 67 | 67 | 66 | 65 | 67 | 66 | 66 |
| Economy | 58 | 56 | 51 | 51 | 52 | 50 | 50 | 50 | 49 | 48 | 46 | 50 | 49 | 48 |
| Social | 88 | 88 | 89 | 89 | 89 | 90 | 88 | 88 | 89 | 88 | 88 | 88 | 88 | 88 |
| Politics | 92 | 92 | 94 | 95 | 97 | 97 | 97 | 97 | 97 | 97 | 97 | 96 | 96 | 96 |

Development of real per capita GDP in Spain with and without increasing globalization



Average GDP gain per year and inhabitant

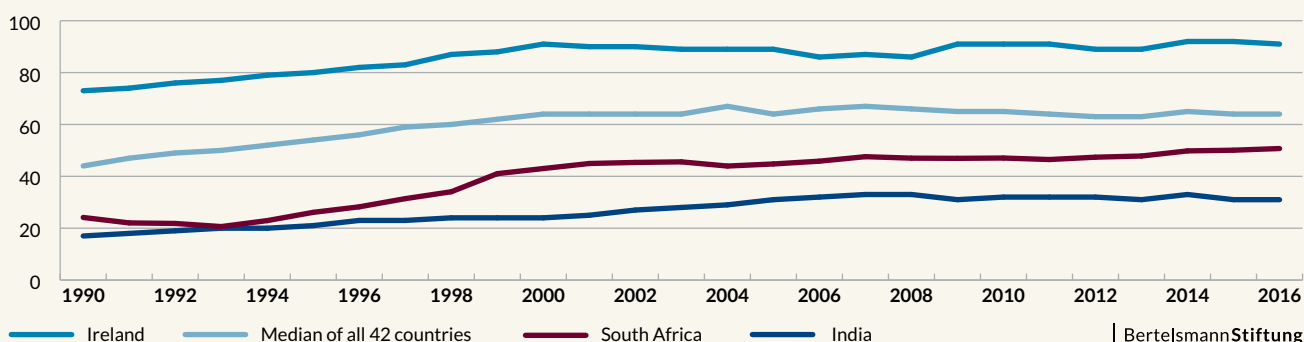
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 23. | Spain | 530 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.36 South Africa



Despite a significant boost for globalization in the 2nd half of the 1990s, international integration and resulting per capita income gains in South Africa are still weaker than in most other countries in this report.

Globalization index for South Africa in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

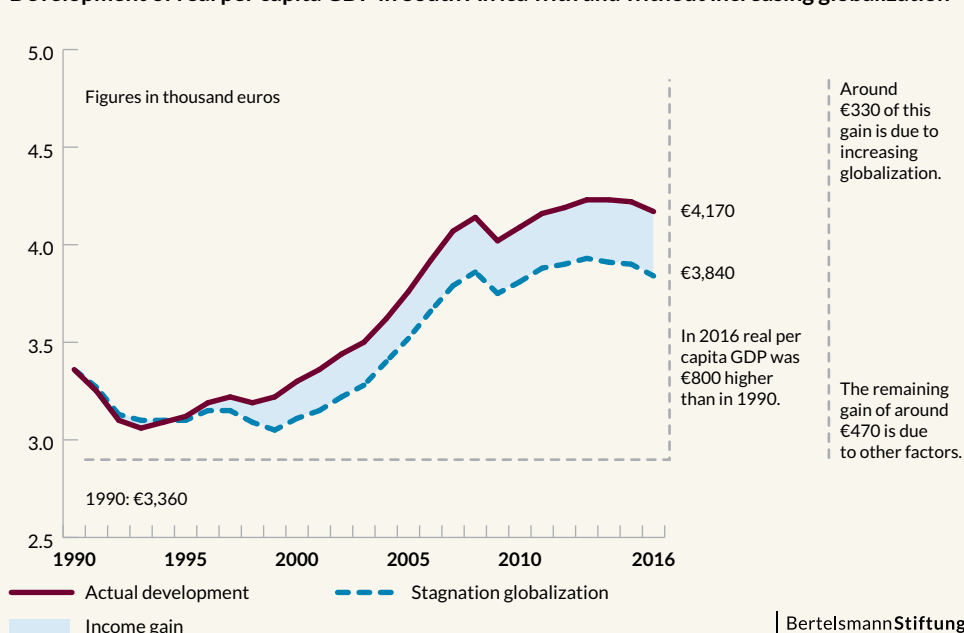


Scores in the globalization index and the three sub-indices for South Africa

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 24 | 22 | 22 | 21 | 23 | 26 | 28 | 31 | 34 | 41 | 43 | 45 | 45 |
| Economy | 26 | 23 | 22 | 19 | 21 | 19 | 20 | 23 | 26 | 31 | 34 | 35 | 36 |
| Social | 21 | 21 | 22 | 24 | 26 | 39 | 41 | 41 | 43 | 43 | 44 | 45 | 44 |
| Politics | 20 | 20 | 20 | 22 | 25 | 34 | 40 | 47 | 48 | 68 | 70 | 75 | 76 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 46 | 44 | 45 | 46 | 48 | 47 | 47 | 47 | 46 | 47 | 48 | 50 | 50 | 51 |
| Economy | 35 | 32 | 33 | 34 | 37 | 35 | 35 | 34 | 33 | 35 | 36 | 38 | 38 | 39 |
| Social | 43 | 43 | 43 | 43 | 43 | 44 | 45 | 46 | 46 | 46 | 46 | 47 | 47 | 47 |
| Politics | 80 | 82 | 83 | 83 | 85 | 86 | 85 | 86 | 86 | 87 | 87 | 88 | 88 | 88 |

Development of real per capita GDP in South Africa with and without increasing globalization



Average GDP gain per year and inhabitant

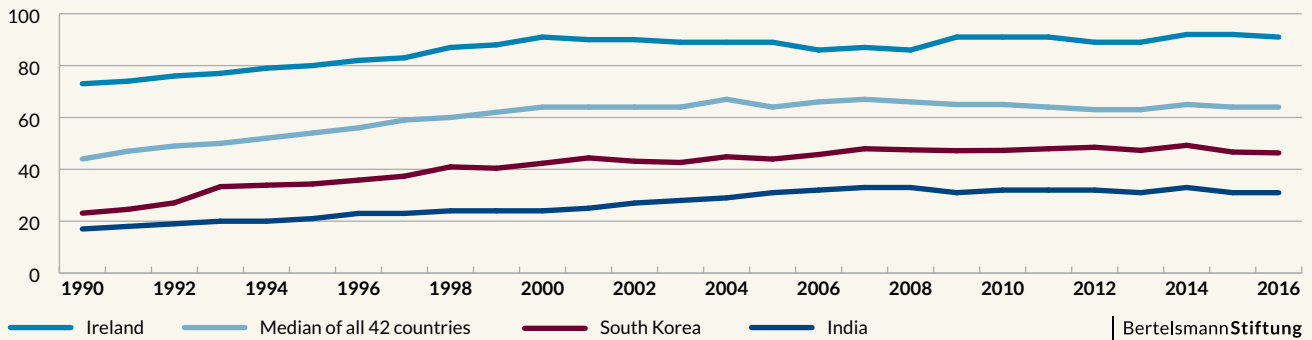
| Ranking | Country | In € |
|---------|--------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 35. | South Africa | 186 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.37 South Korea



South Korea is one of the less globalized countries, in part due to relatively high trade restrictions. In terms of per capita GDP, the “tiger economy” achieves a better ranking due to its strong globalization in the early 1990s.

Globalization index for South Korea in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

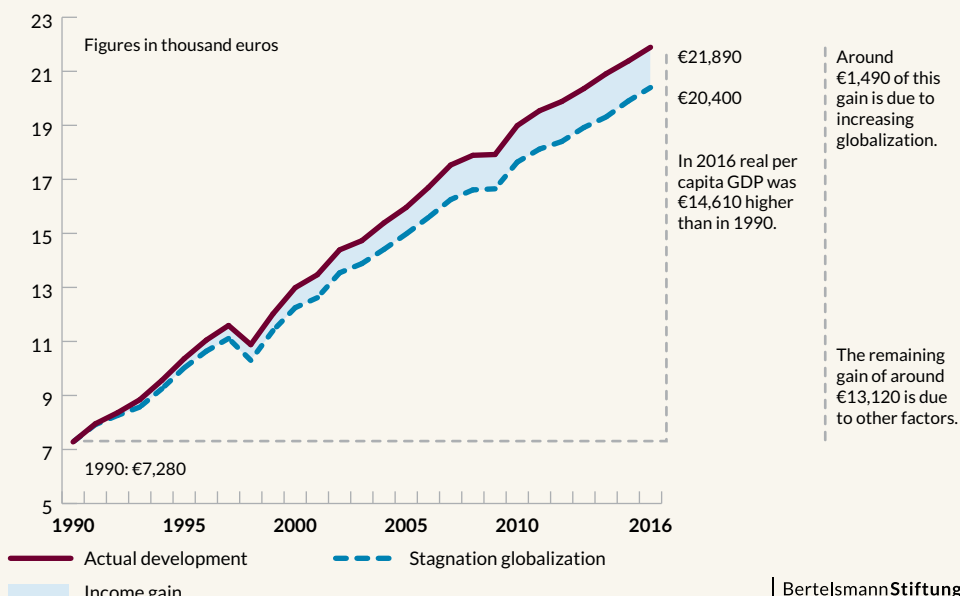


Scores in the globalization index and the three sub-indices for South Korea

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 23 | 25 | 27 | 33 | 34 | 34 | 36 | 37 | 41 | 40 | 42 | 44 | 43 |
| Economy | 14 | 15 | 18 | 20 | 20 | 20 | 21 | 22 | 28 | 26 | 26 | 29 | 26 |
| Social | 34 | 36 | 39 | 41 | 42 | 43 | 45 | 47 | 47 | 49 | 52 | 53 | 54 |
| Politics | 40 | 40 | 43 | 66 | 67 | 67 | 72 | 75 | 74 | 76 | 81 | 83 | 84 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 43 | 45 | 44 | 46 | 48 | 48 | 47 | 47 | 48 | 49 | 47 | 49 | 47 | 46 |
| Economy | 25 | 30 | 29 | 31 | 34 | 32 | 32 | 31 | 32 | 33 | 31 | 34 | 30 | 29 |
| Social | 54 | 54 | 53 | 52 | 53 | 53 | 52 | 53 | 53 | 53 | 53 | 53 | 53 | 53 |
| Politics | 83 | 81 | 81 | 83 | 86 | 87 | 88 | 89 | 90 | 90 | 90 | 90 | 90 | 90 |

Development of real per capita GDP in South Korea with and without increasing globalization



Average GDP gain per year and inhabitant

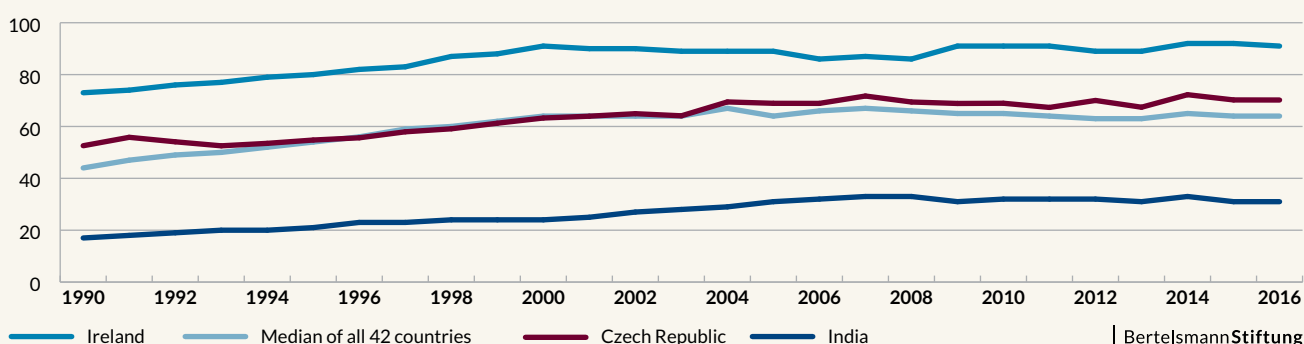
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 10. | South Korea | 908 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.38 Czech Republic



The Czech Republic's globalization has been supported by its high level of integration into Europe's industrial added value chains. Per capita GDP gains are lower than those in other Eastern European countries because the Czech Republic's globalization has been less dynamic.

Globalization index for Czech Republic in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

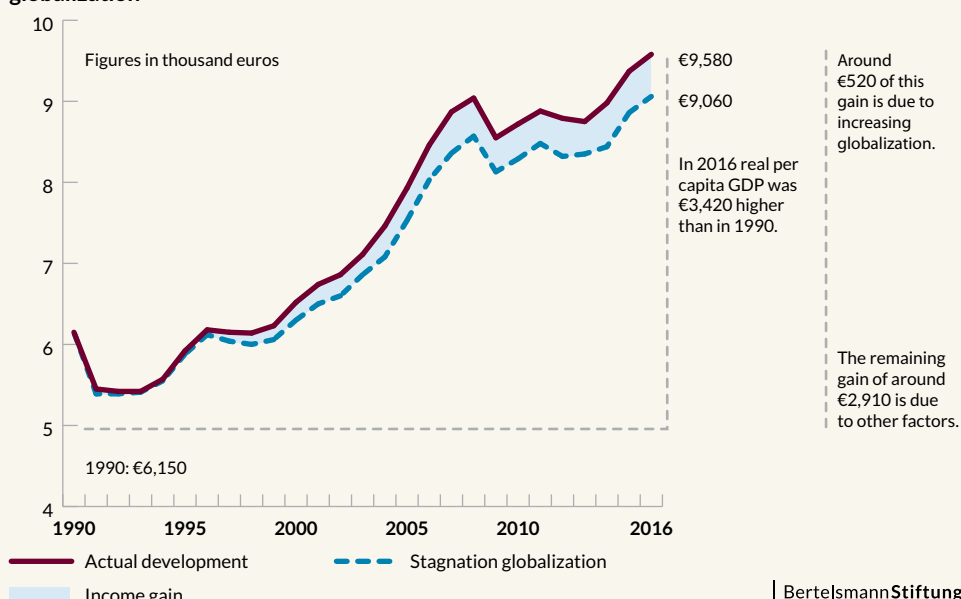


Scores in the globalization index and the three sub-indices for Czech Republic

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 53 | 56 | 54 | 53 | 53 | 55 | 56 | 58 | 59 | 61 | 63 | 64 | 65 |
| Economy | 41 | 46 | 44 | 41 | 41 | 42 | 42 | 45 | 47 | 49 | 52 | 51 | 53 |
| Social | 69 | 69 | 69 | 69 | 72 | 74 | 77 | 80 | 81 | 81 | 81 | 82 | 83 |
| Politics | 71 | 71 | 71 | 71 | 73 | 75 | 74 | 75 | 74 | 77 | 80 | 84 | 84 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 64 | 69 | 69 | 69 | 72 | 69 | 69 | 69 | 67 | 70 | 67 | 72 | 70 | 70 |
| Economy | 51 | 60 | 58 | 58 | 62 | 57 | 57 | 58 | 55 | 59 | 55 | 63 | 60 | 60 |
| Social | 84 | 84 | 85 | 86 | 86 | 88 | 87 | 86 | 86 | 86 | 87 | 87 | 87 | 87 |
| Politics | 85 | 84 | 85 | 86 | 88 | 87 | 86 | 85 | 85 | 86 | 85 | 86 | 86 | 86 |

Development of real per capita GDP in Czech Republic with and without increasing globalization



Average GDP gain per year and inhabitant

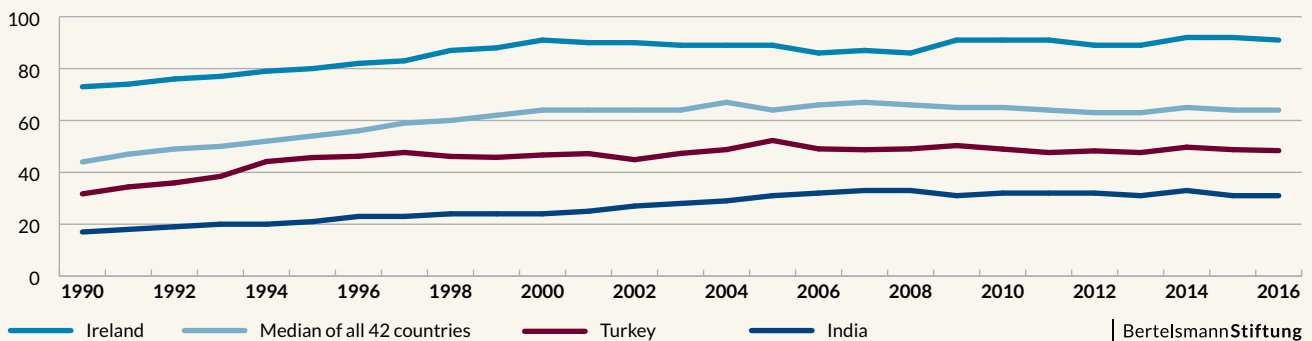
| Ranking | Country | In € |
|---------|----------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 31. | Czech Republic | 289 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.39 Turkey



Turkey is not well integrated with the international community, above all economically and socially. Per capita income gains due to globalization are moderate by international comparison, but exceed the scores in most emerging countries.

Globalization index for Turkey in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

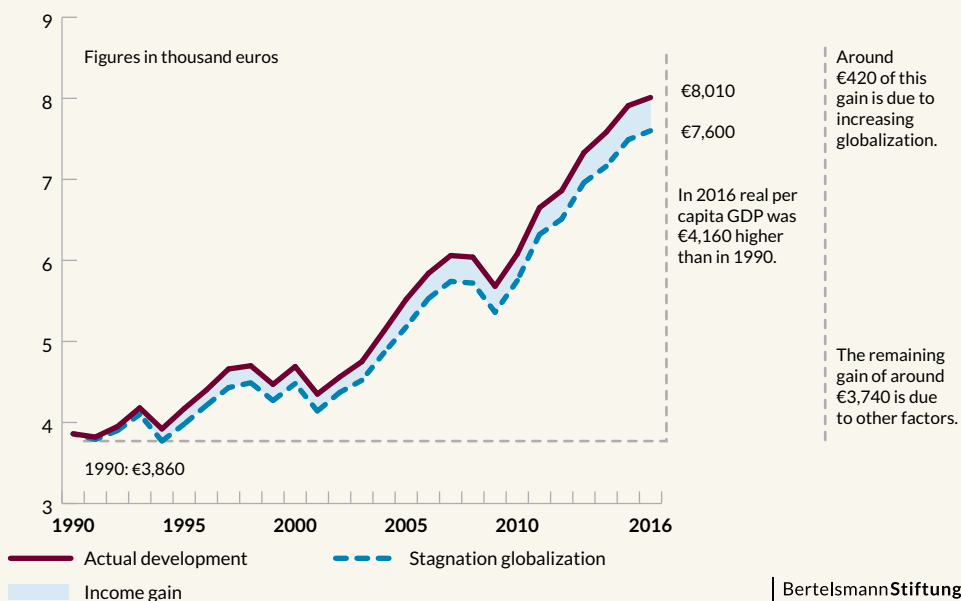


Scores in the globalization index and the three sub-indices for Turkey

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 32 | 34 | 36 | 38 | 44 | 46 | 46 | 48 | 46 | 46 | 47 | 47 | 45 |
| Economy | 20 | 22 | 22 | 24 | 31 | 33 | 34 | 35 | 33 | 32 | 32 | 32 | 29 |
| Social | 31 | 31 | 38 | 38 | 41 | 42 | 45 | 47 | 47 | 47 | 49 | 50 | 48 |
| Politics | 67 | 75 | 75 | 81 | 87 | 87 | 84 | 86 | 85 | 86 | 88 | 90 | 90 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 47 | 49 | 52 | 49 | 49 | 49 | 50 | 49 | 48 | 48 | 48 | 50 | 49 | 48 |
| Economy | 33 | 35 | 36 | 30 | 30 | 28 | 30 | 28 | 25 | 26 | 25 | 29 | 27 | 26 |
| Social | 48 | 49 | 66 | 65 | 67 | 68 | 69 | 69 | 70 | 70 | 70 | 70 | 70 | 70 |
| Politics | 90 | 89 | 89 | 90 | 87 | 93 | 93 | 93 | 93 | 93 | 93 | 92 | 92 | 92 |

Development of real per capita GDP in Turkey with and without increasing globalization



Average GDP gain per year and inhabitant

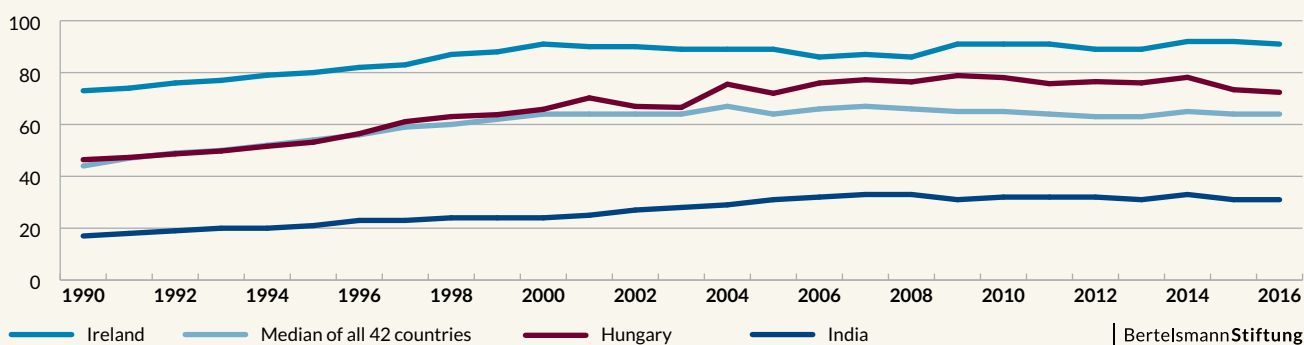
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 32. | Turkey | 257 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.40 Hungary



Hungary followed the trend of increasing integration up until the global financial crisis and thus longer than most other countries. Hungary's per capita GDP gains are in the midfield by international comparison, but at the top relative to its region.

Globalization index for Hungary in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

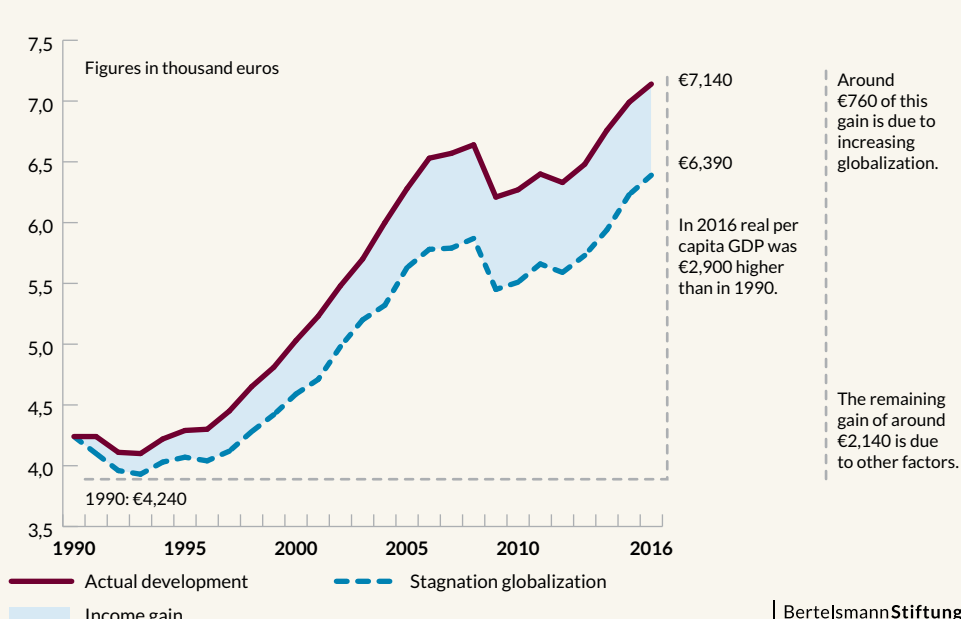


Scores in the globalization index and the three sub-indices for Hungary

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 46 | 47 | 49 | 50 | 52 | 53 | 56 | 61 | 63 | 64 | 66 | 70 | 67 |
| Economy | 35 | 35 | 33 | 32 | 32 | 34 | 39 | 46 | 49 | 49 | 53 | 60 | 55 |
| Social | 65 | 67 | 74 | 76 | 79 | 81 | 81 | 81 | 82 | 82 | 81 | 81 | 81 |
| Politics | 63 | 66 | 71 | 77 | 81 | 83 | 86 | 87 | 87 | 88 | 89 | 90 | 89 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 67 | 76 | 72 | 76 | 77 | 76 | 79 | 78 | 76 | 77 | 76 | 78 | 73 | 72 |
| Economy | 53 | 69 | 62 | 68 | 70 | 68 | 72 | 71 | 67 | 68 | 68 | 71 | 63 | 62 |
| Social | 82 | 82 | 84 | 86 | 86 | 87 | 86 | 86 | 87 | 86 | 86 | 85 | 85 | 85 |
| Politics | 91 | 90 | 90 | 91 | 91 | 92 | 92 | 91 | 91 | 92 | 92 | 91 | 91 | 91 |

Development of real per capita GDP in Hungary with and without increasing globalization



Average GDP gain per year and inhabitant

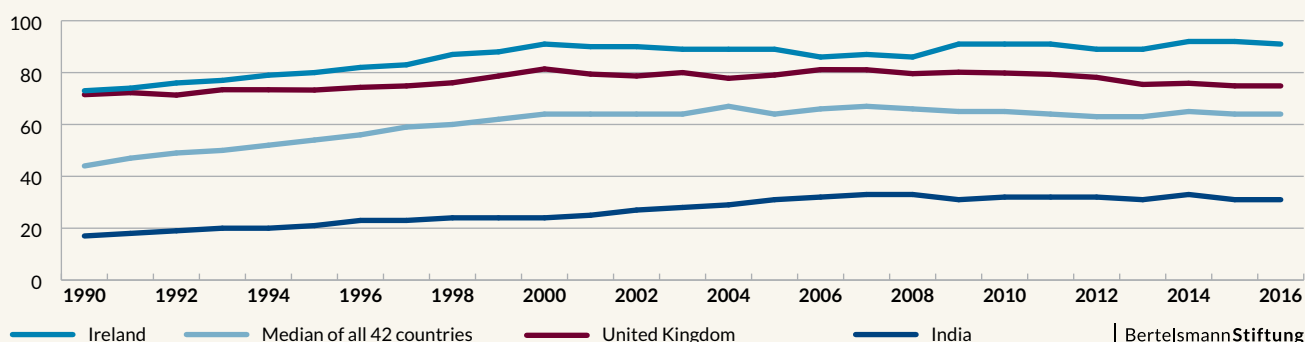
| Ranking | Country | In € |
|---------|-------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 22. | Hungary | 534 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.41 United Kingdom



The United Kingdom is one of the ten most integrated countries in the world. However, its globalization index rose only slowly over the analysis period. As a result, the country's per capita GDP only ranks midfield by international comparison.

Globalization index for the UK in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

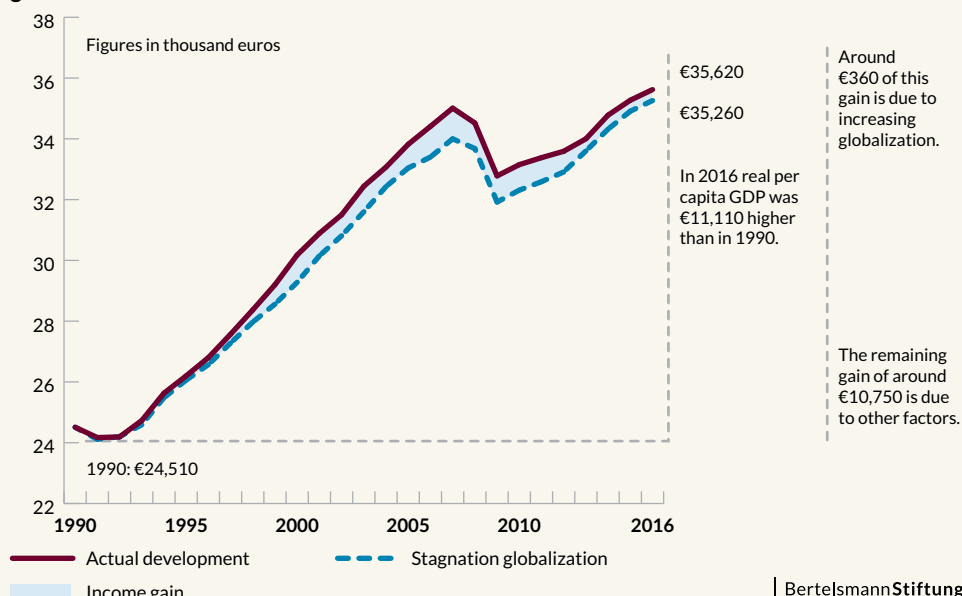


Scores in the globalization index and the three sub-indices for the United Kingdom

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 71 | 72 | 71 | 73 | 73 | 73 | 74 | 75 | 76 | 79 | 81 | 79 | 79 |
| Economy | 64 | 63 | 61 | 63 | 62 | 62 | 63 | 64 | 65 | 69 | 73 | 70 | 68 |
| Social | 77 | 79 | 79 | 80 | 82 | 83 | 86 | 87 | 89 | 90 | 92 | 91 | 93 |
| Politics | 88 | 95 | 95 | 98 | 98 | 98 | 96 | 96 | 96 | 96 | 97 | 97 | 97 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 80 | 78 | 79 | 81 | 81 | 80 | 80 | 80 | 79 | 78 | 75 | 76 | 75 | 75 |
| Economy | 70 | 66 | 68 | 72 | 72 | 69 | 71 | 70 | 69 | 68 | 63 | 64 | 63 | 63 |
| Social | 93 | 93 | 94 | 93 | 94 | 94 | 93 | 92 | 92 | 92 | 92 | 91 | 91 | 91 |
| Politics | 97 | 96 | 96 | 96 | 97 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |

Development of real per capita GDP in the United Kingdom with and without increasing globalization



Average GDP gain per year and inhabitant

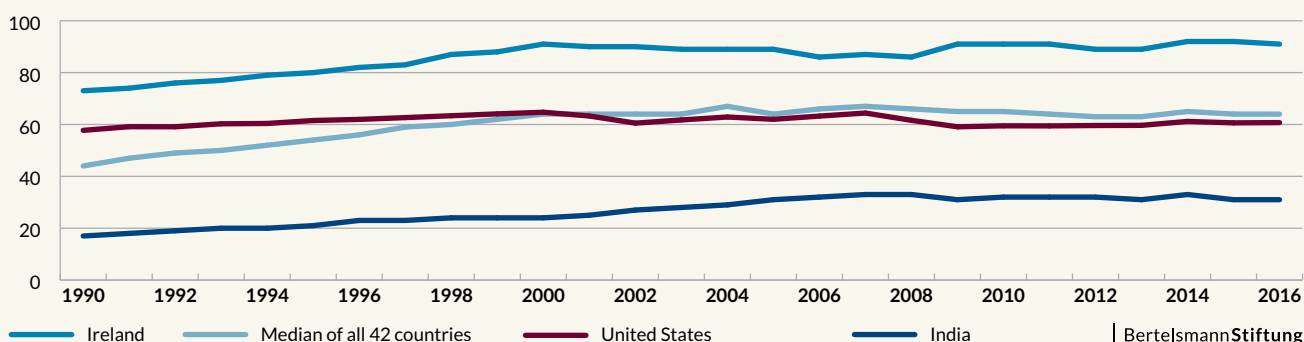
| Ranking | Country | In € |
|---------|----------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 20. | United Kingdom | 548 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

3.42 United States



The United States is less integrated globally than most other countries. It started with a high level of globalization, but has hardly increased its international integration since 1990. Accordingly, per capita GDP gains are moderate.

Globalization index for the United States in comparison to Ireland (highest score in 2016) and India (lowest score in 2016)

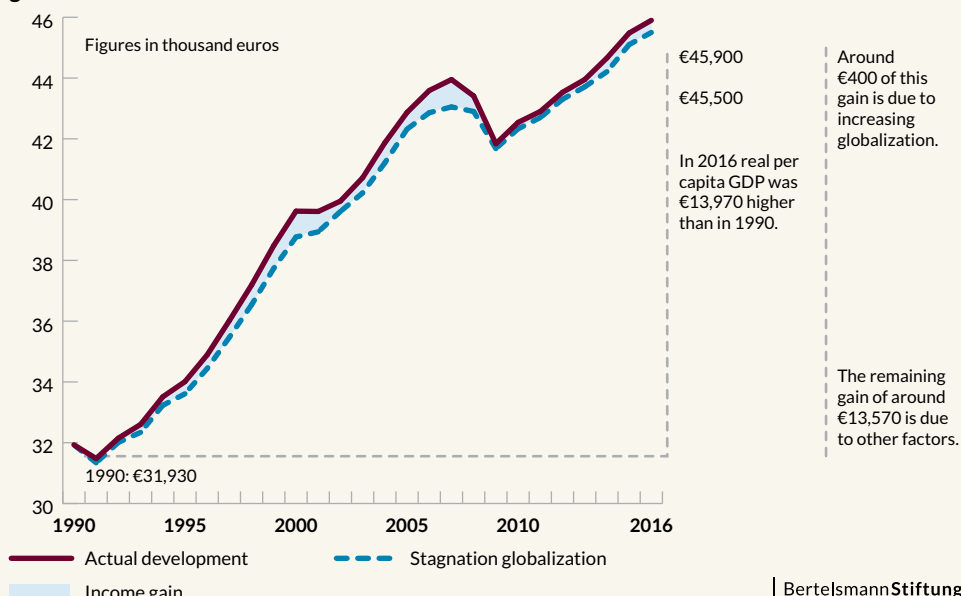


Scores in the globalization index and the three sub-indices for the United States

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 58 | 59 | 59 | 60 | 60 | 62 | 62 | 63 | 63 | 64 | 65 | 63 | 61 |
| Economy | 44 | 44 | 43 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 49 | 47 | 42 |
| Social | 76 | 76 | 77 | 78 | 78 | 80 | 80 | 80 | 81 | 82 | 83 | 83 | 83 |
| Politics | 82 | 87 | 89 | 93 | 92 | 94 | 93 | 93 | 93 | 92 | 93 | 93 | 93 |

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Overall index | 62 | 63 | 62 | 63 | 64 | 62 | 59 | 59 | 59 | 60 | 60 | 61 | 61 | 61 |
| Economy | 44 | 46 | 44 | 46 | 48 | 44 | 40 | 41 | 40 | 41 | 41 | 44 | 43 | 43 |
| Social | 83 | 84 | 84 | 84 | 85 | 85 | 84 | 84 | 84 | 84 | 83 | 83 | 83 | 83 |
| Politics | 94 | 93 | 92 | 93 | 93 | 93 | 92 | 92 | 92 | 93 | 92 | 92 | 92 | 92 |

Development of real per capita GDP in the United States with and without increasing globalization



Average GDP gain per year and inhabitant

| Ranking | Country | In € |
|---------|---------------|-------|
| 1. | Switzerland | 1.913 |
| 2. | Japan | 1.502 |
| 3. | Finland | 1.410 |
| 4. | Ireland | 1.261 |
| 5. | Israel | 1.157 |
| ... | | |
| 25. | United States | 445 |
| ... | | |
| 38. | Mexico | 122 |
| 39. | Russia | 116 |
| 40. | Argentina | 110 |
| 41. | China | 79 |
| 42. | India | 22 |

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5 Appendix

5.1 Methodology for Determining the “Globalization Champion”

The detailed study of the causal correlations between globalization and economic development is the core of the report. Our knowledge of the correlations is used to quantify the economic changes caused by globalization in the ex post time period from 1990 to 2016 and to transfer them to a list of globalization winners.

In order to establish the “globalization champion” we used the following three steps:

- Step 1: Designing the globalization index
- Step 2: Studying the correlations between globalization and economic development
- Step 3: Determining the “globalization champion”

5.1.1 Designing the globalization index

In order to quantify the economic influence of globalization, this multi-layered process must be made measurable. This is done with a comprehensive index. This index is made up of sophisticated indicators illustrating the economic, social and political aspects of globalization (Table 8). The KOF Globalization Index provided by the ETH Zurich is intended as a methodological model for the globalization index used here.¹²

The selected economic indicators are divided into two categories. The first category, “Transaction metrics,” includes indicators that refer to actual transactions of goods, services or financial assets. A larger transaction volume indicates that a country is more strongly interconnected with the rest of the world. The second category, “Transaction restrictions,” includes indicators for restrictions on the free transfer of goods and financial

capital. Transaction restrictions are a sign of a less globalized country. Both the social and political aspects of globalization are represented in the individual sub-indices of the KOF Globalization Index.¹³

The selected indicators illustrate the process of globalization overall very well both in terms of the depth and breadth of the particular aspects. In order to achieve a comprehensive picture of globalization, the indicators must be compiled into an index. To this end, the data is first adjusted for outliers and then normalized to a standardized measure between 0 and 100.¹⁴ Higher values mean “more globalization” in each instance.¹⁵ The removal of the outliers is justified on both content-related and technical grounds: In terms of content, because not every extreme result is an expression of globalization,¹⁶ and technically, because outliers distort the values once the indicators have been standardized.

In the next step, the economic indicators are initially collected into a sub-index. This is done separately for both subject areas “Transaction metrics” and “Transaction restrictions.” In that respect, the main component analysis uses a statistical weighting process which examines the possible linear combinations of the individual indicators and selects the weightings such that the variation in

13 A similar simplification is not possible for the economic components of globalization, since a higher level of detail is needed in the impact analysis of the future globalization scenarios.

14 To correct for outliers, the manifestations of an indicator that lie below the 5 percent quantile and above the 95 percent quantile for this indicator are revised to the upper or lower limits for this quantile.

15 The following formula was used to standardize indicators for which rising values mean “more globalization”:
$$(X_{j,t} - \text{Min}(X)) / (\text{Max}(X) - \text{Min}(X)) * 100.$$

The metric $X_{j,t}$ is the value of the indicator for country j at time t . $\text{Max}(X)$ and $\text{Min}(X)$ are the maximum and minimum of this indicator for all countries at all times. The following formula was used to standardize indicators for which rising values meant “less globalization”:
$$(\text{Max}(X) - X_{j,t}) / (\text{Max}(X) - \text{Min}(X)) * 100.$$

16 By way of example, goods handling at the port of Antwerp overestimates Belgium’s actual exports and imports.

12 See Dreher (2006).

TABLE 8 Globalization indicators used

| Indicators | Description | Source |
|--|--|--|
| Economic indicators | | |
| Transaction variables | | |
| Trade in goods (as % of GDP) | Total exports and imports of goods as a percentage of GDP. | World Bank, World Development Indicators, 2017 |
| Trade in services (as % of GDP) | Total exports and imports of services as a percentage of GDP. | World Bank, World Development Indicators, 2017 |
| Foreign direct investments (as % of GDP) | Total foreign direct investments received and paid (cash balance) as a percentage of GDP. | United Nations Conference on Trade and Development, 2017 |
| Portfolio investments (as % of GDP) | Cash balances of portfolio investments: Total assets and liabilities as a percentage of GDP. | International Monetary Fund, Coordinated Portfolio Investment Survey, 2017 |
| Foreign payments (as % of GDP) | Total wages paid to foreign employees and capital yields as a percentage of GDP. Income from intangible assets is not included. | World Bank, World Development Indicators, 2017 |
| Transaction restrictions | | |
| Mean tariff rate | This indicator is based on the question in the Global Competitiveness Report: "In your country, to what extent do non-tariff trade barriers limit the ability of imported goods to compete in the domestic market?" The wording of this question has changed slightly over the years. Higher values mean lower mean tariff rate. | Fraser Institute, 2017 |
| Non-tariff trade barriers | Indicator between 0 and 10. Higher values mean lower import duties. A value of 0 corresponds to an average non-tariff trade barriers of 50%. | Fraser Institute, 2017 |
| Taxes on international trade (as % of tax receipts) | Taxes on international trade include import and export duties, profits from monopolies, currency gains and taxes on currency gains. | World Bank, World Development Indicators, 2017 |
| Capital controls | Index consisting of two components of equal weight. (1) Indicator based on the question in the Global Competitiveness Report: "How prevalent is foreign ownership in your country?" (2) IMF indicator integrating 13 types of capital controls. | Fraser Institute, 2017 |
| Social indicators | | |
| "Social globalization" sub-index in the KOF Globalization Index | This sub-index includes indicators on personal contacts, information flows and cultural proximity. | ETH Zurich, KOF Globalization Index, 2017 |
| Political indicators | | |
| "Political globalization" sub-index in the KOF Globalization Index | This sub-index includes indicators such as the amount of foreign representation and the number of international treaties, membership in international organizations and participation in UN Security Missions. | ETH Zurich, KOF Globalization Index, 2017 |

Source: Prognos 2018

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the weighted amounts is as small as possible. Thus, the principal component analysis maximizes the statistical power of the resulting index. The sub-indices produced in this way for the individual subject areas are each given a 50% weighting in the Economy sub-index.¹⁷

Next, the three sub-indices are aggregated into a globalization index. The economic components are given a weighting of 60% and the social components and political components each given a weighting of 20%. This deliberate move is consistent with the idea that the greatest importance should be attached to the economic indicators of globalization when assessing the economic development of a country. The disproportionate weighting of the economic components correlates with the aims of this study and is not a general value judgment on the significance of the individual components for globalization.

¹⁷ The choice of weighting of the subject areas is taken from the KOF Globalization Index.

Some of the time series used have gaps. Missing data points are added as follows: gaps within the time series are interpolated in a linear fashion. Missing values at the beginning or end of a time series are replaced by the last available data points. Where an indicator for a country is not available over the entire period, the entire time series is calculated using regression. More concretely, the indicator in an auxiliary regression is explained by all the other indicators. Our knowledge of the explanatory power and forms of the indicators present enables us to approximate the missing indicator.

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5.1.2 Studying the correlations

The aim of this step is to quantify the growth effect of globalization using regression analyses. This enables the effect of individual metrics on economic development to be isolated, while the effects of other metrics for economic development are statistically estimated.

In the regressions, economic development is interpreted as a dependent variable in terms of the percentage growth of per capita output. The globalization index acts as the main dependent metric. The regression results for this variable show how strongly economic development is driven by globalization. Given the importance of globalization for the economic output of an economy we expect this variable to have a significant positive influence.

To ensure that the influence of globalization is neither overestimated nor underestimated, further determinants of economic development must be taken into account (Table 9). The anticipated growth effects of these variables are based both on theoretical considerations and empirical findings:

- The level of per capita GDP is considered in the light of the theory of economic convergence.¹⁸ This theory states that domestic economies with a low per capita GDP tend to display a higher rate of economic growth, which points to this determinant's negative effect.
- A higher birth rate has the short-term effect of distributing a given economic growth across a larger

population base. Accordingly, we anticipate that higher birth rates will correspond to lower growth in economic output per capita.¹⁹

- A positive influence on economic growth per capita can be assumed with regard to investment activities (private and public) because, as a determinant of capital stock, investments contribute substantially to the growth potential of national economies.
- The inflation rate acts as an indicator of macroeconomic stability. A low inflation rate is believed to stimulate economic activity. High inflation is an expression of an overheating economy. Based on these considerations, we expect inflation to have a negative impact on economic growth.
- Government spending as well as the debt ratio are considered key indicators of fiscal policy. The impact of both key indicators on economic growth is not clear. While neoclassical theory suggests that a high debt-to-GDP ratio is accompanied by a reduction in economic growth, the demand-driven business cycle theory assumes that debt-financed stimulus by spending will boost economic output. The effect of government consumption is also unexplained a priori. On the one hand, high government spending can crowd out private investment activity. On the other hand, public consumption expenditure can generate additional demand, promoting private investment.
- We control for the quality of the legal system with the Rule of Law Index. A highly developed legal system is considered an important prerequisite for strong economic growth.²⁰
- Secondary education as a proxy for human capital should have a positive impact on economic growth.
- In addition, we control for the global economic and financial crisis of 2008 and 2009 using an indicator variable.

¹⁸ Per capita GDP is used in the regressions with its value delayed by two years in order to avoid the possibility that per capita growth will partly explain itself as a dependent variable.

¹⁹ Over the long term, a high birth rate can have positive effects on economic growth. However, such effects are not the subject of this study.

²⁰ Theoretically, the connection is unclear. Negative inflation rates (deflation) can also be assumed to exert negative effects on growth. In this analysis, however, deflation phases, with the exception of Japan and Argentina, are limited to the period between 2013 and 2016. In the present report, the European countries Bulgaria, Greece, Slovakia, Spain, Sweden and Switzerland have had negative inflation rates in three to four consecutive periods.

TABLE 9 Potential influences on economic growth as control variables for the regression analyses

| Factors influencing economic growth | Description | Source |
|-------------------------------------|---|--|
| GDP per capita | Per capita GDP in period before last (logarithmized) | World Bank, World Development Indicators, 2017 |
| Birth rate | Birth rate per woman (logarithmized) | World Bank, World Development Indicators, 2017 |
| Investments | Gross investments as a percentage of GDP | World Bank, World Development Indicators, 2017 |
| Inflation | Increase in consumer prices (%) | World Bank, World Development Indicators, 2017 |
| Government consumption | Government consumption expenditure as a percentage of GDP | World Bank, World Development Indicators, 2017 |
| Public debt | Public debt as a percentage of GDP | IMF, 2017 |
| Quality of institutions | Rule of law index (scale from 0 to 10) | Fraser Institute, 2017 |
| Secondary school education | Number of students attending secondary school divided by the number of students entitled to attend secondary school (%) | World Bank, World Development Indicators, 2017 |
| Crisis indicator 2008–2009 | Indicator variable with a value of 1 for the 2008–2009 period and 0 for all other years. | |
| Source: Prognos 2018 | | BertelsmannStiftung |

The regression analyses are based on data for 42 countries included for the period between 1990 and 2016. The specific variables and data sources are listed²¹ in Table 9. In this respect, 25 data points are available for each country and each variable. This data structure is taken into account by means of specific panel regression models.²² In the specification of the regression model, two potential problem sources must be taken into account: unobserved heterogeneity and possible endogeneity of different explanatory factors.

Unobserved heterogeneity occurs where even a careful selection of determinants does not ensure that all differences between the countries under consideration are adequately accounted for. If these unobserved characteristics correlate with neither the dependent variable nor the determinants under consideration, no complication arises. If this is not the case, however, unobserved heterogeneity becomes a problem because the explanatory power of unobserved characteristics may falsely be assigned to other determinants. Thus, unobserved heterogeneity can result in distorted estimates for all determinants. For this reason, fixed effects models are used in this analysis. These control for differences between the countries that can be assumed to be approximately constant over the analyzed period of time.

Endogeneity problems may occur if interdependencies exist between the dependent variable and one or more determinants. This type of connection, among others, may be presumed for investment activities and economic

growth: strong investment activities encourage economic growth (and constitute part of it) while, at the same time, positive economic development leads to a positive investment climate. In such cases, the difficulty arises in that we cannot differentiate which changes in the determinant influence the dependent variable and which changes result from reverse causality. Endogeneity problems also lead to distorted results.

To account for potential endogeneity problems, instrumental variable procedures (short: IV method) are used in this study. In this two-step process (also called a two-stage least squares estimation), each variable for which an endogeneity problem is suspected is divided into two parts: one part that is exogenous with respect to the dependent variable and one endogenous part. In the second step of the process – the actual regression – only the exogenous part of the original regressor is taken into account. This ensures that no endogeneity problems exist in the final regression. In order to apply this method, at least one instrumental variable is needed for each potential endogenous determinant. It must be highly correlated with the endogenous explanatory variable while simultaneously holding explanatory power for the dependent variable, but must not be affected by the same endogeneity problem. In this study the time series of the potentially endogenous control variables are lagged by one year and then used as instrumental variables. Assuming that the dependent variables can be affected by current and past growth rates of the gross domestic product, but not by future realizations, these time series meet all the requirements for suitable instrumental variables. Based on this approach, the assumption of exogeneity was discarded for the investment activity and birth rate variables.

21 Since the gross domestic product per capita is used in the regressions with its value delayed by two years, the data used for the regressions refers to the period of time between 1992 and 2016.

22 All analyses were performed with the Eviews 10 statistics program.

In addition to the control variables, the globalization index was used as an explanatory variable in the regression. The globalization index from the respective previous year served analogously as the instrument variable. This takes account of the possible endogeneity problem between economic growth and the degree of globalization in an economy. For example, it is conceivable that a good economy due to an increase in domestic consumption will cause imports to increase and thus simultaneously lift the globalization index. The IV method can be used to eliminate such problems of reverse causation. The instrument estimate confirms the statistically significant, positive influence of globalization on the development of per capita gross domestic product and thus points to a clear correlation.

The regression results with respect to the effects of globalization can be interpreted as follows: If the globalization index rises by one point, the growth of per capita GDP increases by β percentage points, where β is the level of the estimated growth effect of globalization. To illustrate this: the economic growth per capita is 2.5 percent; the estimated effect of globalization is $\beta = 0.2$. In this case, a rise in the globalization index by one point leads to an increase in economic growth (*ceteris paribus*) from 2.5 to 2.7 percent. This correlation is constant for all observed countries and for the entire period studied.

This knowledge of the sensitivity of per capita economic growth with regard to globalization is then used in the next phase of the work in order to quantify individual countries' globalization-induced growth increases.

5.1.3 Determining the “globalization champion”

Globalization-induced increases in growth are quantified in two consecutive steps:

- Initially, a mathematical calculation is made for each country to determine the growth rates that it would have had in the event of a period of stagnation in globalization at the globalization index value in 1990. Next, the annual changes in the globalization index are multiplied by the estimated globalization effect and subtracted from the historical growth rate values.
- Based on the GDP at the start of the period in question and applying the recently calculated growth rates, a counterfactual growth trajectory is created for each country to illustrate its economic development in the event of a period of stagnation in globalization.

By comparing historical values of GDP with the values that arise from the counterfactual growth trajectory, we can quantify and compare the individual countries' globalization-induced increases and decreases in growth. The decisive factor in the final determination of the “globalization champion” is which country achieved the greatest gains in per capita income as a result of globalization over the whole period between 1990 and 2016.

5.2 Additional tables

TABLE 10 Globalization index over time, Argentina to Germany

| | ARG | AUS | BEL | BRA | BUL | CHL | CHN | DNK | DEU |
|------|------|------|------|------|------|------|------|------|------|
| 1990 | 34.3 | 52.8 | 77.7 | 28.2 | 28.8 | 34.3 | 23.0 | 65.8 | 52.7 |
| 1991 | 37.0 | 53.8 | 80.3 | 29.4 | 26.7 | 37.2 | 24.3 | 69.4 | 59.1 |
| 1992 | 37.6 | 55.6 | 80.6 | 31.4 | 33.2 | 38.2 | 25.2 | 71.7 | 59.1 |
| 1993 | 40.3 | 57.1 | 81.7 | 32.1 | 31.6 | 39.1 | 26.4 | 74.1 | 60.1 |
| 1994 | 42.6 | 59.2 | 82.4 | 32.1 | 31.9 | 41.3 | 26.7 | 75.3 | 60.9 |
| 1995 | 46.5 | 59.9 | 77.7 | 34.5 | 33.9 | 42.0 | 28.4 | 75.8 | 63.1 |
| 1996 | 45.1 | 59.9 | 81.0 | 35.2 | 37.9 | 43.0 | 28.1 | 76.3 | 64.7 |
| 1997 | 44.0 | 60.2 | 82.0 | 35.0 | 35.8 | 45.4 | 28.5 | 75.6 | 66.7 |
| 1998 | 44.6 | 61.0 | 82.4 | 34.0 | 39.0 | 46.9 | 31.8 | 75.0 | 68.3 |
| 1999 | 44.7 | 62.2 | 83.5 | 34.6 | 42.1 | 50.1 | 32.8 | 76.3 | 68.4 |
| 2000 | 44.6 | 63.6 | 88.6 | 34.0 | 46.5 | 52.8 | 33.2 | 82.4 | 71.4 |
| 2001 | 43.0 | 64.2 | 88.4 | 37.8 | 47.0 | 55.6 | 38.0 | 81.1 | 70.2 |
| 2002 | 41.1 | 62.6 | 86.4 | 39.1 | 44.4 | 55.8 | 35.7 | 80.1 | 71.1 |
| 2003 | 39.1 | 63.7 | 86.6 | 37.5 | 48.0 | 59.1 | 36.2 | 79.9 | 72.4 |
| 2004 | 40.8 | 63.7 | 87.9 | 39.4 | 53.4 | 61.7 | 40.7 | 78.1 | 71.3 |
| 2005 | 38.3 | 63.3 | 87.4 | 41.1 | 51.1 | 62.4 | 42.4 | 79.1 | 69.9 |
| 2006 | 36.7 | 65.6 | 89.1 | 40.4 | 57.4 | 65.7 | 39.6 | 79.4 | 70.4 |
| 2007 | 36.6 | 67.3 | 90.0 | 40.5 | 66.1 | 67.3 | 41.7 | 81.7 | 70.8 |
| 2008 | 36.6 | 64.1 | 90.0 | 38.4 | 63.4 | 66.1 | 40.4 | 78.8 | 68.0 |
| 2009 | 34.8 | 65.7 | 90.2 | 38.3 | 60.0 | 63.3 | 41.0 | 76.6 | 67.6 |
| 2010 | 34.8 | 66.4 | 88.1 | 39.9 | 58.8 | 63.1 | 40.6 | 77.6 | 66.9 |
| 2011 | 33.6 | 66.4 | 86.7 | 39.3 | 57.8 | 59.9 | 40.0 | 76.8 | 66.7 |
| 2012 | 34.3 | 64.4 | 86.0 | 39.2 | 61.8 | 57.8 | 39.8 | 76.0 | 66.8 |
| 2013 | 34.0 | 62.8 | 84.6 | 38.5 | 63.8 | 57.4 | 40.7 | 75.2 | 65.0 |
| 2014 | 34.2 | 65.5 | 88.2 | 39.7 | 64.4 | 62.3 | 42.1 | 78.1 | 67.5 |
| 2015 | 34.2 | 63.9 | 85.8 | 38.6 | 64.8 | 58.8 | 40.9 | 77.3 | 66.6 |
| 2016 | 34.7 | 64.8 | 85.6 | 38.7 | 63.7 | 58.9 | 40.9 | 77.3 | 66.3 |

Source: Prognos 2018

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TABLE 11 Globalization index over time, Estonia to Japan

| | EST | FIN | FRA | GRC | IND | IRL | ISR | ITA | JPN |
|----------------------|------|------|------|------|------|---------------------|------|------|------|
| 1990 | 38.2 | 54.8 | 60.9 | 38.5 | 17.2 | 72.6 | 38.8 | 50.1 | 37.2 |
| 1991 | 38.2 | 58.6 | 63.4 | 47.6 | 17.9 | 74.2 | 38.4 | 52.1 | 38.8 |
| 1992 | 38.2 | 60.9 | 64.6 | 48.4 | 18.9 | 75.5 | 38.7 | 54.0 | 43.1 |
| 1993 | 41.6 | 64.2 | 65.7 | 51.1 | 19.9 | 77.3 | 42.2 | 56.3 | 43.6 |
| 1994 | 46.2 | 64.8 | 64.0 | 51.8 | 20.4 | 79.0 | 42.9 | 56.6 | 43.2 |
| 1995 | 58.5 | 65.9 | 64.7 | 52.0 | 21.1 | 80.4 | 42.2 | 58.4 | 40.1 |
| 1996 | 60.8 | 69.8 | 65.6 | 53.7 | 23.4 | 81.6 | 44.8 | 59.7 | 43.8 |
| 1997 | 64.0 | 71.1 | 67.9 | 55.5 | 23.4 | 82.6 | 47.3 | 61.2 | 44.8 |
| 1998 | 63.9 | 71.8 | 70.3 | 58.4 | 23.6 | 86.5 | 50.1 | 63.0 | 47.2 |
| 1999 | 64.3 | 72.3 | 72.5 | 61.7 | 23.8 | 87.6 | 53.6 | 66.2 | 48.0 |
| 2000 | 66.4 | 75.7 | 72.4 | 65.1 | 24.5 | 90.8 | 57.2 | 67.9 | 49.1 |
| 2001 | 67.2 | 74.9 | 69.1 | 65.2 | 24.9 | 90.3 | 59.2 | 66.3 | 48.4 |
| 2002 | 67.0 | 73.8 | 71.5 | 64.5 | 27.0 | 89.6 | 60.6 | 65.0 | 47.8 |
| 2003 | 69.0 | 75.0 | 71.2 | 66.6 | 28.3 | 88.9 | 61.6 | 64.3 | 50.6 |
| 2004 | 72.7 | 75.8 | 73.1 | 67.6 | 28.9 | 89.5 | 60.7 | 66.8 | 51.0 |
| 2005 | 71.6 | 73.4 | 71.4 | 64.6 | 31.3 | 88.9 | 62.4 | 65.7 | 51.4 |
| 2006 | 72.3 | 73.8 | 71.7 | 64.5 | 31.8 | 85.9 | 61.3 | 64.8 | 51.1 |
| 2007 | 73.8 | 75.7 | 73.2 | 65.9 | 32.6 | 87.5 | 62.2 | 65.0 | 51.3 |
| 2008 | 72.9 | 73.2 | 71.1 | 65.6 | 32.7 | 85.7 | 63.6 | 63.1 | 50.2 |
| 2009 | 70.9 | 72.4 | 71.2 | 64.1 | 31.1 | 90.8 | 63.9 | 63.4 | 50.6 |
| 2010 | 72.9 | 73.7 | 71.0 | 62.8 | 31.9 | 91.4 | 63.5 | 62.8 | 50.6 |
| 2011 | 72.5 | 74.7 | 69.7 | 61.9 | 32.1 | 90.7 | 56.7 | 61.2 | 49.3 |
| 2012 | 71.9 | 75.7 | 70.3 | 61.1 | 31.9 | 89.4 | 56.6 | 60.5 | 50.8 |
| 2013 | 70.6 | 70.8 | 69.0 | 62.2 | 31.1 | 89.4 | 55.9 | 59.7 | 54.0 |
| 2014 | 72.6 | 73.7 | 72.3 | 63.5 | 32.6 | 91.7 | 58.9 | 62.0 | 55.4 |
| 2015 | 70.4 | 72.7 | 70.5 | 60.3 | 31.3 | 91.7 | 57.6 | 63.5 | 52.1 |
| 2016 | 70.7 | 72.7 | 70.2 | 59.7 | 30.9 | 91.3 | 57.6 | 63.2 | 51.8 |
| Source: Prognos 2018 | | | | | | BertelsmannStiftung | | | |

TABLE 12 Globalization index over time, Canada to Austria

| | CAN | LIT | LTV | MEX | NZL | NDL | NOR | AUT |
|----------------------|------|------|------|------|------|---------------------|------|------|
| 1990 | 60.5 | 32.8 | 30.3 | 33.9 | 53.7 | 74.4 | 66.8 | 64.3 |
| 1991 | 61.9 | 32.7 | 30.2 | 34.1 | 56.4 | 76.5 | 68.4 | 67.8 |
| 1992 | 62.6 | 32.3 | 30.0 | 37.7 | 59.2 | 78.1 | 67.9 | 67.7 |
| 1993 | 64.0 | 32.1 | 32.0 | 37.6 | 59.8 | 78.7 | 68.7 | 69.0 |
| 1994 | 64.8 | 35.3 | 36.6 | 38.3 | 61.0 | 79.2 | 69.4 | 69.9 |
| 1995 | 66.2 | 42.3 | 39.9 | 42.1 | 61.5 | 78.9 | 68.9 | 70.6 |
| 1996 | 67.2 | 47.2 | 44.2 | 37.9 | 61.8 | 79.8 | 69.8 | 72.0 |
| 1997 | 68.8 | 49.5 | 45.2 | 36.8 | 63.0 | 81.9 | 70.2 | 73.5 |
| 1998 | 70.4 | 49.8 | 46.3 | 36.5 | 65.2 | 83.4 | 70.3 | 74.7 |
| 1999 | 72.0 | 49.7 | 46.6 | 35.7 | 66.9 | 85.7 | 70.1 | 76.6 |
| 2000 | 75.2 | 50.3 | 45.0 | 35.8 | 69.8 | 90.0 | 71.2 | 78.7 |
| 2001 | 73.8 | 53.6 | 47.3 | 34.6 | 68.0 | 88.1 | 70.5 | 77.6 |
| 2002 | 71.1 | 54.0 | 48.0 | 35.2 | 67.2 | 86.2 | 67.3 | 76.7 |
| 2003 | 72.6 | 55.0 | 49.2 | 35.2 | 65.7 | 88.2 | 70.5 | 78.1 |
| 2004 | 73.4 | 57.7 | 54.9 | 35.5 | 66.8 | 90.7 | 68.1 | 78.5 |
| 2005 | 71.1 | 57.5 | 56.2 | 40.3 | 66.2 | 89.9 | 63.8 | 77.7 |
| 2006 | 70.6 | 57.6 | 57.2 | 37.6 | 67.8 | 89.9 | 66.8 | 78.4 |
| 2007 | 72.2 | 59.1 | 59.3 | 38.9 | 67.5 | 91.5 | 69.5 | 80.7 |
| 2008 | 68.9 | 58.7 | 58.3 | 38.3 | 68.2 | 90.5 | 67.1 | 77.5 |
| 2009 | 70.7 | 53.6 | 55.0 | 40.0 | 67.7 | 89.7 | 69.5 | 77.0 |
| 2010 | 70.9 | 56.3 | 56.9 | 41.3 | 66.8 | 90.6 | 68.0 | 75.8 |
| 2011 | 68.7 | 58.2 | 57.9 | 41.7 | 66.5 | 91.3 | 66.4 | 75.7 |
| 2012 | 68.7 | 57.9 | 59.1 | 42.2 | 64.5 | 91.1 | 68.9 | 75.9 |
| 2013 | 68.8 | 61.2 | 58.8 | 42.3 | 62.7 | 90.5 | 68.2 | 73.3 |
| 2014 | 71.6 | 62.4 | 60.7 | 43.5 | 65.4 | 92.6 | 67.3 | 76.7 |
| 2015 | 70.7 | 64.7 | 60.0 | 43.4 | 62.9 | 91.2 | 71.1 | 76.0 |
| 2016 | 71.7 | 65.0 | 60.0 | 44.0 | 62.4 | 91.1 | 70.9 | 75.5 |
| Source: Prognos 2018 | | | | | | BertelsmannStiftung | | |

TABLE 13 Globalization index over time, Poland to Slovenia

| | POL | PRT | ROU | RUS | SWE | CHE | SVK | SVN |
|------|------|------|------|------|------|------|------|------|
| 1990 | 33.8 | 45.2 | 22.7 | 26.9 | 68.7 | 64.5 | 43.5 | 26.8 |
| 1991 | 35.2 | 50.5 | 25.2 | 27.1 | 70.2 | 66.7 | 42.3 | 26.8 |
| 1992 | 38.1 | 55.3 | 25.1 | 28.0 | 70.0 | 67.0 | 41.5 | 29.6 |
| 1993 | 39.4 | 59.3 | 26.2 | 31.6 | 71.9 | 67.9 | 40.9 | 31.4 |
| 1994 | 39.3 | 60.6 | 29.1 | 32.7 | 72.4 | 67.9 | 41.3 | 34.9 |
| 1995 | 42.4 | 61.7 | 32.3 | 34.5 | 73.1 | 67.7 | 44.3 | 35.7 |
| 1996 | 43.2 | 63.0 | 33.3 | 35.5 | 72.9 | 73.6 | 46.0 | 38.7 |
| 1997 | 43.9 | 64.1 | 34.9 | 36.2 | 74.5 | 77.3 | 47.8 | 45.3 |
| 1998 | 46.7 | 65.3 | 34.4 | 38.6 | 75.3 | 80.1 | 50.0 | 47.3 |
| 1999 | 47.8 | 65.6 | 36.1 | 38.0 | 75.7 | 82.3 | 50.5 | 47.6 |
| 2000 | 49.8 | 68.7 | 39.6 | 38.7 | 78.1 | 89.1 | 54.3 | 49.5 |
| 2001 | 48.3 | 69.9 | 41.3 | 40.5 | 77.0 | 86.3 | 57.8 | 51.5 |
| 2002 | 50.3 | 66.9 | 43.2 | 42.5 | 77.2 | 84.3 | 54.4 | 52.0 |
| 2003 | 53.1 | 68.9 | 43.8 | 43.5 | 78.0 | 84.1 | 55.3 | 56.5 |
| 2004 | 60.8 | 72.5 | 46.3 | 43.0 | 78.7 | 81.3 | 72.9 | 62.6 |
| 2005 | 58.2 | 69.6 | 51.3 | 43.8 | 78.3 | 83.1 | 71.9 | 62.1 |
| 2006 | 59.1 | 72.9 | 47.1 | 43.4 | 79.3 | 81.2 | 71.7 | 62.1 |
| 2007 | 61.5 | 74.7 | 60.5 | 44.3 | 80.7 | 82.0 | 72.1 | 64.3 |
| 2008 | 60.6 | 73.3 | 60.0 | 41.9 | 78.6 | 81.3 | 70.6 | 65.2 |
| 2009 | 60.5 | 73.7 | 59.1 | 44.3 | 80.2 | 81.9 | 68.7 | 60.8 |
| 2010 | 59.6 | 73.8 | 57.4 | 44.3 | 79.8 | 82.4 | 68.9 | 60.8 |
| 2011 | 58.6 | 71.5 | 55.9 | 43.1 | 75.9 | 78.9 | 68.6 | 60.5 |
| 2012 | 59.4 | 70.4 | 56.5 | 43.4 | 75.4 | 81.0 | 66.9 | 60.5 |
| 2013 | 60.7 | 68.5 | 58.4 | 44.6 | 73.9 | 80.4 | 66.6 | 60.4 |
| 2014 | 62.4 | 70.9 | 60.8 | 44.4 | 78.7 | 82.3 | 70.3 | 63.0 |
| 2015 | 61.9 | 71.3 | 61.2 | 45.9 | 77.7 | 82.7 | 66.6 | 62.9 |
| 2016 | 62.6 | 70.8 | 61.6 | 46.5 | 76.5 | 83.1 | 66.5 | 62.5 |

Source: Prognos 2018

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TABLE 14 Globalization index over time, Spain to the United Kingdom

| | ESP | ZFA | KOR | CZE | TUR | HUN | USA | GBR |
|------|------|------|------|------|------|------|------|------|
| 1990 | 55.2 | 24.1 | 23.1 | 52.6 | 31.7 | 46.4 | 57.7 | 71.5 |
| 1991 | 57.1 | 22.0 | 24.6 | 55.8 | 34.4 | 47.3 | 59.1 | 72.3 |
| 1992 | 59.0 | 21.8 | 27.1 | 54.1 | 35.9 | 48.7 | 59.1 | 71.3 |
| 1993 | 60.9 | 20.6 | 33.3 | 52.5 | 38.4 | 49.8 | 60.3 | 73.4 |
| 1994 | 62.2 | 22.9 | 33.9 | 53.5 | 44.2 | 51.6 | 60.4 | 73.4 |
| 1995 | 62.8 | 26.1 | 34.4 | 54.8 | 45.7 | 53.1 | 61.5 | 73.3 |
| 1996 | 63.4 | 28.2 | 35.8 | 55.6 | 46.2 | 56.5 | 62.0 | 74.3 |
| 1997 | 64.8 | 31.4 | 37.4 | 57.9 | 47.7 | 61.1 | 62.7 | 74.9 |
| 1998 | 66.5 | 34.1 | 41.0 | 59.1 | 46.1 | 63.0 | 63.4 | 76.1 |
| 1999 | 67.8 | 41.0 | 40.4 | 61.3 | 45.8 | 63.8 | 64.1 | 78.7 |
| 2000 | 69.9 | 43.0 | 42.3 | 63.3 | 46.7 | 65.8 | 64.7 | 81.4 |
| 2001 | 68.7 | 44.9 | 44.4 | 64.0 | 47.2 | 70.2 | 63.3 | 79.4 |
| 2002 | 68.5 | 45.4 | 43.1 | 64.9 | 44.9 | 67.0 | 60.5 | 78.7 |
| 2003 | 70.6 | 45.6 | 42.6 | 64.1 | 47.3 | 66.6 | 61.8 | 80.0 |
| 2004 | 69.9 | 44.0 | 44.8 | 69.5 | 48.8 | 75.5 | 62.9 | 77.8 |
| 2005 | 67.2 | 44.8 | 44.0 | 68.9 | 52.3 | 72.0 | 62.0 | 79.1 |
| 2006 | 67.4 | 45.8 | 45.7 | 68.9 | 49.0 | 76.0 | 63.2 | 81.1 |
| 2007 | 68.5 | 47.6 | 47.9 | 71.7 | 48.7 | 77.2 | 64.4 | 81.1 |
| 2008 | 67.1 | 47.0 | 47.5 | 69.4 | 49.1 | 76.4 | 61.6 | 79.6 |
| 2009 | 67.1 | 46.9 | 47.2 | 68.9 | 50.3 | 78.9 | 59.1 | 80.2 |
| 2010 | 67.2 | 47.1 | 47.3 | 69.0 | 49.0 | 78.1 | 59.5 | 79.8 |
| 2011 | 66.7 | 46.5 | 47.9 | 67.3 | 47.6 | 75.7 | 59.4 | 79.3 |
| 2012 | 65.9 | 47.4 | 48.5 | 70.0 | 48.3 | 76.5 | 59.6 | 78.2 |
| 2013 | 64.7 | 47.8 | 47.3 | 67.4 | 47.6 | 76.0 | 59.7 | 75.4 |
| 2014 | 66.8 | 49.8 | 49.3 | 72.3 | 49.7 | 78.2 | 61.2 | 75.9 |
| 2015 | 66.1 | 50.1 | 46.7 | 70.2 | 48.8 | 73.4 | 60.6 | 74.9 |
| 2016 | 66.0 | 50.7 | 46.3 | 70.2 | 48.4 | 72.4 | 60.7 | 74.9 |

Source: Prognos 2018

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TABLE 15 Regression results of the determinants of economic growth per inhabitant – reliability test

| Dependent variable: Growth of per capita GDP in percent | IV method with FE | IV method with FE | IV method with FE | IV method with FE | IV method with FE | IV method with FE |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| Globalization overall | 0.33*** (0.07) | 0.32*** (0.07) | 0.26*** (0.06) | 0.26*** (0.06) | 0.27*** (0.06) | 0.27*** (0.06) |
| Per capita GDP in period before last (logarithmized) | -8.86*** (1.57) | -8.76*** (1.58) | -7.81*** (1.61) | -7.6*** (1.7) | -7.46*** (1.71) | -7.89*** (1.73) |
| Birth rate (logarithmized) | -8.07*** (1.98) | -7.61*** (1.9) | -7.3*** (2.07) | -7.56*** (2.02) | -7.39*** (2.07) | -7.001*** (2.004) |
| Investments (as % of GDP) | 0.15** (0.07) | 0.15** (0.07) | 0.1 (0.06) | 0.04 (0.11) | 0.05 (0.1) | 0.04 (0.1) |
| Crisis indicator 2008–2009 | -3.81*** (0.41) | -3.83*** (0.42) | -3.37*** (0.34) | -3.41*** (0.34) | -3.42*** (0.34) | -3.33*** (0.34) |
| Inflation (in %) | | -0.003 (0.004) | -0.004 (0.004) | -0.004 (0.004) | -0.004 (0.004) | -0.004 (0.004) |
| Government consumption expenditure as a percentage of GDP | | | -0.61*** (0.11) | -0.59*** (0.12) | -0.58*** (0.13) | -0.59*** (0.13) |
| Public debt as a percentage of GDP | | | | -0.02 (0.02) | -0.02 (0.02) | -0.02 (0.02) |
| Rule of law index | | | | | 0.31 (0.49) | 0.29 (0.49) |
| Secondary school education | | | | | | 0.023 (0.02) |
| Number of observations | 1,050 | 1,050 | 1,050 | 1,050 | 1,050 | 1,050 |
| R ² (centered) | 0.439 | 0.443 | 0.486 | 0.476 | 0.478 | 0.478 |

Notes: The symbols *, ** and *** show the significance of the estimates for the 10%, 5% and 1% levels. The figures in brackets are the standard errors by country clusters. All regressions contain a constant. FE = country-specific fixed effects

Source: Prognos 2018

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TABLE 16 Regression results of the determinants of economic growth per inhabitant with sub-index-specific estimates of the influence of globalization on growth – reliability test

| Dependent variable: Growth of per capita GDP in percent | IV method and with FE and sub-index-specific estimates | IV method and with FE and sub-index-specific estimates | IV method and with FE and sub-index-specific estimates | IV method and with FE and sub-index-specific estimates | IV method and with FE and sub-index-specific estimates | IV method and with FE and sub-index-specific estimates |
|---|--|--|--|--|--|--|
| Globalization for | | | | | | |
| • Economic globalization | 0.09*** (0.03) | 0.09*** (0.03) | 0.05* (0.03) | 0.06* (0.03) | 0.06* (0.03) | 0.06* (0.03) |
| • Social globalization | 0.15*** (0.04) | 0.15*** (0.07) | 0.13*** (0.05) | 0.13*** (0.05) | 0.12*** (0.05) | 0.12*** (0.05) |
| • Political globalization | 0.15** (0.07) | 0.14** (0.04) | 0.16** (0.04) | 0.16** (0.04) | 0.16** (0.04) | 0.16** (0.04) |
| Per capita GDP in period before last (logarithmized) | -11.42*** (1.5) | -11.29*** (1.48) | -10.67*** (1.48) | -10.68*** (1.46) | -10.55*** (1.42) | -10.51*** (1.44) |
| Birth rate (logarithmized) | -4.61*** (1.68) | -4.38** (1.71) | -4.35** (1.75) | -4.34** (1.73) | -4.22** (1.71) | -4.27** (1.74) |
| Investments (as % of GDP) | 0.49*** (0.06) | 0.48*** (0.06) | 0.42*** (0.06) | 0.43*** (0.08) | 0.43*** (0.08) | 0.43*** (0.07) |
| Crisis indicator 2008–2009 | -4.42*** (0.44) | -4.43*** (0.44) | -4.01*** (0.38) | -4*** (0.38) | -4*** (0.38) | -4.01*** (0.38) |
| Inflation (in %) | | -0.002 (0.002) | -0.003 (0.003) | -0.003 (0.003) | -0.003 (0.003) | -0.003 (0.003) |
| Government consumption expenditure as a percentage of GDP | | | -0.52*** (0.1002) | -0.52*** (0.1) | -0.51*** (0.1) | -0.51*** (0.1) |
| Public debt as a percentage of GDP | | | | 0.002 (0.02) | 0.004 (0.01) | 0.004 (0.01) |
| Rule of law index | | | | | 0.24 (0.59) | 0.24 (0.59) |
| Secondary school education | | | | | | -0.002 (0.01) |
| Number of observations | 1,050 | 1,050 | 1,050 | 1,050 | 1,050 | 1,050 |
| R ² (centered) | 0.497 | 0.499 | 0.544 | 0.543 | 0.543 | 0.542 |

Notes: The symbols *, ** and *** show the significance of the estimates for the 10%, 5% and 1% levels. The figures in brackets are the standard errors by country clusters. All regressions contain a constant. FE = country-specific fixed effects

Source: Prognos 2018

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Bertelsmann Stiftung
Carl-Bertelsmann-Straße 256
33311 Gütersloh
Phone +49 5241 81-0
www.bertelsmann-stiftung.de

Responsible

Dr. Cora Jungbluth
Dr. Thieß Petersen

Authors

Johann Weiß,
Dr. Andreas Sachs,
Heidrun Weinelt,
Prognos AG, München

Translation

ETC Europe scri

Grafic Design

Nicole Meyerholz, Bielefeld

Picture

My Life Graphic | Shutterstock Images

Print

Matthiesen Druck, Bielefeld

Address | Contact

Bertelsmann Stiftung
Carl-Bertelsmann-Straße 256
33311 Gütersloh
Phone +49 5241 81-0

GED-Team

Programm Megatrends
Phone +49 5241 81-81353
ged@bertelsmann-stiftung.de
www.ged-project.de

www.bertelsmann-stiftung.de